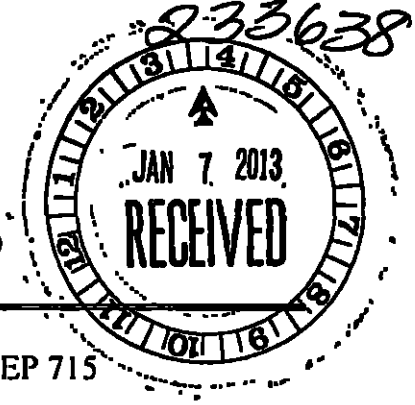

BEFORE THE
SURFACE TRANSPORTATION BOARD

RATE REGULATION REFORMS	)	Docket No. EP 715

REBUTTAL SUBMISSION OF WESTERN COAL TRAFFIC LEAGUE, CONCERNED CAPTIVE COAL SHIPPERS, AMERICAN PUBLIC POWER ASSOCIATION, EDISON ELECTRIC INSTITUTE, NATIONAL RURAL ELECTRIC COOPERATIVE ASSOCIATION, WESTERN FUELS ASSOCIATION, INC., AND BASIN ELECTRIC POWER COOPERATIVE, INC.

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Dated: January 7, 2013

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GLOSSARY

AAR	Association of American Railroads
AEP Texas	*AEP Tex. N. Co v BNSF Ry.*, NOR 41191 (Sub-No. 1) (STB served Sept. 10, 2007)
AEPCO	*Ariz Elec. Power Coop., Inc. v. BNSF Ry. & Union Pac. R R.*, NOR 42113 (STB served Nov. 22, 2011)
ARC	Alliance for Rail Competition, *et al.*
ATC	Average Total Cost
BNSF	BNSF Railway Company
Chemical Shippers	American Chemistry Counsel, *et al*
Chlorine Shippers	Chlorine Institute
Coal Rate Guidelines	*Coal Rate Guidelines, Nationwide*, 1 I.C.C.2d 520 (1985), *aff'd sub nom. Consolidated Rail Corp. v. United States*, 812 F.2d 1444 (3d Cir. 1987)
Coal Shippers	Western Coal Traffic League, Concerned Captive Coal Shippers, American Public Power Association, Edison Electric Institute, National Rural Electric Cooperative Association, Western Fuels Association, Inc., and Basin Electric Power Cooperative, Inc
CSXT	CSX Transportation, Inc.
CURE	Consumers United for Rail Equity
DuPont	*E.I DuPont de Nemours & Co. v. Norfolk S Ry* , NOR 42125 (STB served Nov. 29, 2012)
Duke/NS	*Duke Energy Corp v. Norfolk S. Ry.*, 7 S.T B 89 (2003)
ECP	Efficient Component Pricing
FERC	Federal Energy Regulatory Commission
Grain Shippers	National Grain and Feed Association
July 2012 Decision	*Rate Regulation Reforms*, EP 715 (STB served July 25, 2012)

June 2011 AEPCO	*Ariz. Elec. Power Coop., Inc. v. BNSF Ry. and Union Pac. R.R.*, NOR 42113 (STB served June 27, 2011)
Major Issues	*Major Issues in Rail Rate Cases*, EP 657 (Sub-No. 1) (STB served Oct. 30, 2006), *aff'd sub nom. BNSF Ry. v. STB*, 526 F.3d 770 (D.C. Cir. 2008)
MMM	Maximum Markup Methodology
NS	Norfolk Southern Railway Company
Otter Tail	*Otter Tail Power Co. v. BNSF Ry.*, NOR 42071 (STB served Jan. 27, 2006)
RFA	Regulatory Flexibility Act of 1980, 5 U.S.C. §§ 601-612
RPI	Road Property Investment
Railroads	BNSF, UP, NS, CSXT, and AAR
SAC	Stand-Alone Cost
SARR	Stand-Alone Railroad
STB/Board	Surface Transportation Board
UP	Union Pacific Railroad Company
URCS	Uniform Railroad Costing System
USDA	United States Department of Agriculture
UTU-NY	Samuel J. Nasca for and on behalf of United Transportation Union – New York State Legislative Board
WFA	W. Fuels Ass'n, Inc. v. BNSF Ry., NOR 42088 (STB served Feb. 18, 2009, June 5, 2009, and June 15, 2012)
WFA 2007	W. Fuels Ass'n, Inc. v. BNSF Ry., NOR 42088 (STB served Sept. 10, 2007)
Xcel	*Pub. Serv. Co. of Colo. d/b/a Xcel Energy v. The Burlington N. and S.F. Ry.*, 7 S.T.B. 589 (2004)

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REBUTTAL SUBMISSION OF WESTERN COAL TRAFFIC LEAGUE, CONCERNED CAPTIVE COAL SHIPPERS, AMERICAN PUBLIC POWER ASSOCIATION, EDISON ELECTRIC INSTITUTE, NATIONAL RURAL ELECTRIC COOPERATIVE ASSOCIATION, WESTERN FUELS ASSOCIATION, INC., AND BASIN ELECTRIC POWER COOPERATIVE, INC.

In response to the Surface Transportation Board's ("STB" or "Board") decision served in this proceeding on July 25, 2012 ("*July 2012 Decision*"), the Western Coal Traffic League, Concerned Captive Coal Shippers, American Public Power Association, Edison Electric Institute, National Rural Electric Cooperative Association, Western Fuels Association, Inc., and Basin Electric Power Cooperative, Inc. (collectively "Coal Shippers") present the following rebuttal submission.

SUMMARY

The purpose of this proceeding is to "improve ways to protect captive rail shippers from unreasonable rates."[1] The parties in the best position to know what ways will improve captive shipper protections are captive shippers. Coal Shippers urge the Board to listen to the concerns raised by captive shippers in this proceeding and to take

[1] STB News Release No. 12-13 at 1 (July 25, 2012)

remedial actions that truly will improve ways to protect captive shippers from unreasonable rail rates.[2]

Cross-Over Traffic Limitations

The Board should not adopt its proposals to limit the use of cross-over traffic in Full-SAC cases. If adopted, the proposals would gut the SAC test and make it difficult, if not impossible, for most (if not all) shippers to obtain any relief in Full-SAC cases. Thus, Full-SAC would end up in the same regulatory graveyard where the Board's other "constraints" on large case rail pricing – revenue adequacy, management efficiency, and phasing – now reside.

The Railroads claim that shippers concerns are overstated: all shippers need to do, according to the Railroads, is to expand or contract their stand-alone railroads' footprints and traffic groups However, the forced expansion of traffic groups would necessarily result in stand-alone railroads ("SARR") that are so massive that they would replicate virtually all of the defendant railroads' networks. The associated

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[2] Reply submissions ("Reply") were filed in this case by Coal Shippers and American Chemistry Council, *et al.* ("Chemical Shippers"); Chlorine Institute ("Chlorine Shippers"); National Grain and Feed Association ("Grain Shippers"); Alliance for Rail Competition, *et al.*("ARC"); and Consumers United for Rail Equity ("CURE"). Railroad parties filing Replies were: BNSF Railway ("BNSF"); Union Pacific Railroad Company ("UP"); the Association of American Railroads ("AAR"); Norfolk Southern Railway Company ("NS"), CSX Transportation, Inc. ("CSXT") (collectively BNSF, UP, AAR, NS, and CSXT shall be referred to as the "Railroads") A reply submission was also filed by Samuel J. Nasca for and on behalf of United Transportation Union – New York State Legislative Board ("UTU-NY"). Opening ("Op.") submissions were tendered by all parties submitting Reply submissions, except for UTU-NY and CURE. Several other parties filed Opening submissions but did not submit Reply submissions, including the United States Department of Agriculture ("USDA").

modeling cost, expense, and complications would render SAC obsolete. Similarly, reducing the scope of SARRs would deny shippers the benefits of scale, scope and density enjoyed by incumbents, and result in sky-high maximum SAC rates that also would render SAC obsolete

Moreover, the Board's rationale for its cross-over traffic limitation proposals is flawed. The Board predicates its proposals on an asserted "disconnect" between revenues allocated under the Board's Average Total Cost ("ATC") method on cross-over traffic and the actual costs being incurred by the SARR and the residual incumbent to handle this traffic. However, there is no "disconnect" because ATC is predicated on allocating the defendant carrier's revenues on cross-over traffic based on the variable costs incurred by the real-world defendant carrier – not the SARR – in transporting this traffic.

UP argues that the real "disconnect" does not involve the SARR's costs, but instead is an asserted "disconnect" between the revenues allocated under Modified ATC and the defendant carrier's real-world variable costs in providing service over the on-SARR and off-SARR routes ATC variable costs are calculated using the Board's Uniform Rail Costing System ("URCS") Phase III procedures, so UP's argument is really an unsupported collateral attack on the Board's use of URCS Phase III costs in ATC.

Coal Shippers demonstrated in their Opening submission that the URCS Phase III procedures were not producing any "disconnects," as they reflected the use of system-average unit costs for loading, line-haul service and unloading in a consistent manner. No Railroad introduced any evidence to the contrary.

Finally, Coal Shippers emphasized that even if any "disconnect" did exist, the "disconnect" could be handled by making adjustments to the URCS Phase III program. Significantly, UP, BNSF, CSXT, and NS agree. Thus, there simply is no reason to impose the draconian sanction of limiting the use of cross-over traffic.

Alternative ATC

The Board should not adopt its proposal to replace Modified ATC with Alternative ATC. Modified ATC is superior to Alternative ATC because Modified ATC, unlike Alternative ATC, properly takes into account economies of density, and produces logical and reasonable results when applied to low, medium and high rated traffic movements.

As Coal Shippers noted in their Reply submission, the Railroads offered only tepid support for Alternative ATC. AAR prefers Original ATC, UP prefers Efficient Component Pricing ("ECP"), and NS/CXST prefer using SARR costs. Each of these methods has been rejected – with good reason – by the Board in past decisions.

On reply, the Railroads generally argue that if the Board does not adopt their preferred revenue allocation procedures, the Board should adopt Alternative ATC However, in making this argument, the Railroads have no answers to Coal Shippers' demonstration that application of Alternative ATC produces illogical results that arbitrarily favor low-density lines over high-density lines in the revenue allocation process.

For example, Coal Shippers demonstrated that on some low/medium rated traffic moves (where the through movement R/VC ratio was greater than one),

Alternative ATC would allocate all movement contribution to the low-density segment whereas Modified ATC would fairly allocate the contribution between the involved segments. The Railroads offer no explanation why all contribution should be allocated to the low-density segment, as it is under Alternative ATC, rather than shared between the two segments, as it is under Modified ATC.

As a second example, Coal Shippers demonstrated that on high-rated movements, Alternative ATC allocates a disproportionate share of movement profit (*i.e*, revenue above ATC) to the low-density segment, making the low-density segment appear more profitable than the lower cost high-density segment, a result that violates all known principles of scale economies The Railroads only responsive argument is that no railroad movement is profitable until the railroad reaches system-wide revenue adequacy. This is an absurd assertion, and simply demonstrates that the Railroads have no credible defense of Alternative ATC.

Coal Shippers also have shown that Modified ATC could be improved if the formula recognized that high-density lines have higher total fixed costs than low-density lines. To accomplish this objective, Coal Shippers have proposed Corrected Modified ATC.

AAR, BNSF and UP argue that Coal Shippers have it wrong. They claim that the fixed costs per ton are the same on high-density and low-density segments. The Board has gone back and forth on this issue, initially holding that high-density segments have higher total fixed costs and then concluding otherwise.

However, when the Board changed course it did not have before it the evidence tendered by Coal Shippers in this proceeding. For example, as Coal Shippers emphasized in their Opening submission, the Board's decision in *Otter Tail*[3] provides a simple example demonstrating that high-density SARR segments have substantially higher fixed costs than lower density SARR segments.

Similarly, the Board now has before it specific evidence demonstrating that while fixed costs do not vary with volume, this fact does not take away from the fact that most investments and expenses are made for specific things (*e.g* , a bridge) or personnel (*e g* , crews) and most of these costs are associated with a particular location on a railroad, with high-density segments having more investments, and expenses, and therefore greater fixed costs.

Coal Shippers also tendered two other alternatives that are superior to Alternative ATC: Three Step ATC and Variable Cost Allocation. The Railroads present no credible evidence demonstrating that either of these two alternatives is not superior to Alternative ATC.

Simplified-SAC and Three-Benchmark Cases

Coal Shippers request that the Board to remove all relief caps on Simplified-SAC and Three-Benchmark Cases; allow 10-year rate prescriptions in these cases; and not adopt its proposal requiring shippers to submit detailed road property investment ("RPI") calculations in Simplified-SAC cases. These requests are supported

[3] *Otter Tail Power Co v BNSF Ry.*, NOR 42127 (STB served Jan. 27, 2006) ("*Otter Tail*").

by all shippers in this proceeding, as well as USDA. Their adoption is necessary if these methodologies are to provide any meaningful rate relief to any shipper who chooses to invoke them.

Interest

Coal Shippers support the Board's proposal to use the prime rate to set interest on reparation awards. This is the measure of interest that the Federal Energy Regulatory Commission ("FERC") uses, and no party to this proceeding has advanced any credible rationale for the Board not to follow FERC's practice. Coal Shippers emphasize that interest on reparations will be a moot point for most coal shippers if the Board adopts its Full-SAC proposals.[4]

ARGUMENT

I.

THE BOARD SHOULD NOT ADOPT ITS PROPOSED LIMITATIONS ON CROSS-OVER TRAFFIC

In its 2006 decision in *Major Issues*,[5] the Board characterized its historic support for cross-over traffic as "reasonable and intelligibly explained," and insisted that it would not "make an about-face" and "prohibit the use of cross-over traffic":

> The Board's reasons for permitting cross-over traffic were set forth in Xcel at 13-17, and have been affirmed as reasonable and intelligibly explained, BNSF Ry. v. STB, 453 F.3d at

[4] The Board also has failed to comply with the Regulatory Flexibility Act of 1980 ("RFA"), 5 U.S.C. §§ 601-612.

[5] *Major Issues in Rail Rate Cases*, EP 657 (Sub-No. 1) (STB served Oct. 30, 2006), *aff'd sub nom. BNSF Ry. v. STB*, 526 F.3d 770 (D.C. Cir. 2008) ("*Major Issues*").

> 482. *We will not now make an about-face and prohibit the use of cross-over traffic . . . .*[6]

Six years later, however, the Board is proposing to reverse course entirely because of the supposed failure of URCS to properly calculate the variable cost component of Modified ATC.[7] The Board's proposed limitations should not be adopted because, as Coal Shippers demonstrated in their Opening and Reply submissions, they are "improper, unprecedented, and massively overbroad" limitations that "strike[] at the heart of the SAC test" and would "gut a shipper's grouping rights." Coal Shippers Op. at 2, 12.[8]

A. The Railroads' Claims that the Proposed Cross-Over Traffic Limitations Would Not Harm Shippers are Wrong

The Railroads argue in their reply filings that the Board's proposed cross-over traffic limitations would not harm shippers.[9] Their arguments are unavailing. The adoption of the Board's proposed limitations would require shippers either to construct

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[6] *Id.*, slip op. at 36 (emphasis added).

[7] *See July 2012 Decision*, slip op. at 16-17.

[8] Contrary to the suggestions in the Railroads' reply filings, adoption of the Board's proposed cross-over traffic limitations would constitute an impermissible barrier to entry. *See* Rebuttal Verified Statement of Thomas D. Crowley and Daniel L. Fapp ("Crowley/Fapp Reb. VS") at 31 (under the definition used by Professors Baumol, Panzar, and Willig, an entry barrier can be manifested as a cost or as a restriction to a production technique); *see also Coal Rate Guidelines, Nationwide*, 1 I.C.C.2d 520, 529 (1985), *aff'd sub nom. Consol. Rail Corp. v. United States*, 812 F.2d 1444 (3d Cir. 1987) ("*Coal Rate Guidelines*") (insisting that the costs "and other limitations" associated with entry and exit barriers must be omitted from the SAC analysis).

[9] *See, e.g.*, AAR Reply at 6; BNSF Reply at 15; UP Reply at 4-5.

extraordinarily large and unwieldy SARR systems or to forego categories of traffic that are available to incumbent carriers.

The Railroads' illogical response, reduced to its essence, is that the Board's proposed limitations will not harm shippers because shippers will be able to choose between two different alternatives, either one of which would gut the SAC test. On the one hand, the Railroads argue that the Board's proposed traffic limitations would not require a complainant to forego any traffic for its SARR because the complainant always could elect to expand its system to serve the origin and/or the destination of a given movement.[10]

On the other hand, when confronted with the fact that the Board's proposed limitations would require shippers to construct prohibitively large and complex SARR systems capable of serving the origin and/or destination of desirable traffic, the Railroads argue that shippers can avoid that problem simply by declining to include that traffic in their SARR models.[11]

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[10] *See, e.g* , AAR Reply at 6 ("[T]he Board's proposals do not require shippers to forgo any traffic in the SAC analysis [because] if shippers want to include a given non-issue movement in the analysis, [they] would simply be required to include either the origin or the destination of the movement to more accurately reflect the costs of the movement in the analysis "); BNSF Reply at 15 ("Nothing in the limitations proposed by the Board on the use of cross-over traffic prohibits a complainant from including any traffic it wants on a SARR."); UP Reply at 4 ("Neither proposal restricts the volume of traffic that would be available to the SARR."); *id.* at 5 n.4 ("Under the Board's proposals, a SARR's traffic group could still include all the same non-issue traffic that it could include today . . . ").

[11] *See, e.g.*, AAR Reply at 7 ("[T]he Board's proposals would not require that complainants add substantial portions of the defendant's network to their SARRs

Obviously, the railroads cannot legitimately claim an absence of harm to shippers by virtue of the fact that shippers can select between two different adverse options, either of which would effectively gut the SAC test. Forcing shippers to build SARRs that provide origin and/or destination service to all members of the traffic group would result in a "cascading analysis that could result eventually in a complainant having to replicate almost all of the [defendant carrier's] system."[12] The required modeling would "become so complicated as to risk being intractable"[13] and would "deny captive shippers meaningful access to the rate review provided for under [the *Coal Rate*] *Guidelines*."[14]

Likewise, forcing shippers to exclude cross-over traffic from their SARRs would deny shippers their right to group traffic in order to capture the "economies of scale, scope and density that the defendant carrier enjoys over the routes replicated."[15] This too would gut the SAC test because "[w]ithout grouping, SAC would not be a very useful test."[16]

[because] the Board's proposals would merely limit the inclusion of cross-over traffic . . . ")

[12] *Pub. Serv. Co. of Colo d/b/a Xcel Energy v Burlington N & Santa Fe Ry.*, 7 S.T B 589, 602 (2004) ("*Xcel*").

[13] *Id.*

[14] *W. Fuels Ass'n, Inc. v. BNSF Ry*. NOR 42088, slip op. at 11 (STB served Sept. 10, 2007) ("*WFA 2007*").

[15] *Xcel*, 7 S T.B at 601.

[16] *Coal Rate Guidelines*, 1 I.C.C.2d at 544.

Both of these SAC-busting options also constitute impermissible barriers to entry. Forcing shippers to build massive SARRs denies shippers a common production technique used by railroads: the choice of relying on other carriers to originate or terminate traffic. *See* Crowley/Fapp Reb. VS at 30-35. Similarly, limiting a shipper's grouping rights (because it is too expensive and complicated to model origin-to-destination SARRs) denies shippers another basic production technique used by railroads: reducing costs through economies of scale, scope and density. *Id.*[17]

B. Nothing in the Railroads' Reply Filings Provides Any Support for the Board's Proposed Limitations

As Coal Shippers demonstrated in their Opening and Reply submissions, the Board bases its proposed cross-over traffic limitations on two flawed claims: *first*, the Board claims that there is a disconnect between the "hypothetical cost" of a SARR's overhead service and the "revenue allocated" for service; and *second*, the Board claims that it has no "means of correcting or minimizing the bias that is created by the disconnect" absent a new rule precluding shippers' inclusion of such traffic in their SARR systems. *See July 2012 Decision*, slip op. at 16 Significantly, neither claim is correct, and nothing the Railroads filed on Opening or Reply provides any support for the Board's two flawed premises.

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[17] UP argues that barriers to entry exist only if the SARR is forced to incur costs that the defendant carrier did not incur. *See* UP Reply at 5. Crowley/Fapp demonstrate that this definition is too narrow. *Id.*, Reb. VS at 30-32. SAC is based on contestable market theory, and under that theory, "an entry barrier can be manifested as a cost or as restriction to a production technique." *Id.*, Reb. VS at 31.

1. The Board's Perceived "Disconnect" Does Not Exist

The Board claims that there is a disconnect between: (a) "the *hypothetical* cost of providing service [for carload and multi-carload cross-over] movements over the segments replicated by the SARR"; and (b) "the revenue allocated to those facilities." *July 2012 Decision*, slip op at 16-17 (emphasis added), *see also id* at 16 ("the 'cost' to the SARR of handling this traffic would be very low").

As Coal Shippers explained in their Opening submission, the Board's evaluation is wrong because – by its own directive – divisions on cross-over traffic must be calculated on the basis of the incumbent carrier's actual costs and operations, not the "hypothetical" costs incurred by the SARR.[18] Given these prior Board directives requiring parties to calculate ATC divisions solely on the basis of the *incumbent's* actual costs, the Board's suggestion of an ATC disconnect related to the SARR's "hypothetical costs" represents a major, unexplained, and unjustified departure from the Board's established approach *See* Coal Shippers Op. at 25.

Both BNSF and UP attempt to prove that some sort of relevant "disconnect" exists, but neither carrier provides a credible explanation:

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[18] *See, e.g.*, Coal Shippers Op. at 24-25 (citing *AEP Texas N. Co. v. BNSF Ry.*, NOR 41191 (Sub-No. 1), slip op. at 13 (STB served Sept. 10, 2007) ("*AEP Texas*") ("[T]he purpose of ATC is to determine the *defendant carrier's* relative costs for the various line segments . . . . [T]he ATC revenue allocation we use here properly focuses on determining the relative costs to the *defendant carrier* of handling the movement on each part of its system.") (emphasis added)); *see also Major Issues*, slip op. at 35 ("the ATC method . . is keyed to the *defendant carrier's* relative costs of providing service") (emphasis added)

- UP argues that Coal Shippers have "mischaracterized" the Board's analysis because, according to UP, the disconnect the Board is concerned about is the disconnect between the revenues allocated to the SARR and the real-world costs incurred by the defendant carrier in providing the service over the routes replicated by the SARR. UP claims that the disconnect occurs because the revenue "allocations are not accurately reflecting the costs of services" the defendant carrier is providing in the real world:

> Coal Shippers also appear to mischaracterize the Board's concern as involving the relation between the SARR's operating costs and the allocation of the incumbent's revenue to the SARR. . . UP understands the Board's concern to be that its revenue allocation method is, in certain circumstances, allocating more revenue to the facilities that are being replicated by the SARR than is warranted *because the allocations are not accurately reflecting the costs of the services the incumbent is providing* on the portions of its route being replicated by the SARR, and *the costs of the services the incumbent is providing* on the portions of its route that are not being replicated by the SARR.[19]

Coal Shippers have not "mischaracterized the Board's concern." Instead, Coal Shippers submit that UP has not read the Board's *July 2012 Decision* correctly. That decision very clearly states that the Board's concern was the "disconnect between the hypothetical cost of providing service to these movements replicated by the SARR and the revenue allocated to those facilities."[20]

Moreover, even if the asserted disconnect involves the real world carrier's costs, UP offers no explanation, and offers no expert testimony, rebutting the expert

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[19] UP Reply at 6 n.6 (emphasis added).

[20] *Id* at 16.

showing Coal Shippers made in their Opening submission that the Board's use of Phase III URCS variable costs does not result in the systematic overstatement or understatement of variable costs, or revenue allocations based on those variable costs, under the ATC methodology.

- BNSF argues that a disconnect exists in cases where the residual incumbent originates carload traffic; the traffic is interchanged with the SARR; and then returned to the residual incumbent. The disconnect occurs, BNSF asserts, on this "hook-and-haul" traffic because ATC assigns costs to the SARR (and revenues to cover those costs) that the SARR does not incur:

> Complainants typically assume that the SARR will operate as a "hook-and-haul" railroad and therefore will not incur costs associated with gathering carload traffic for placement on trains, switching carload traffic in yards, train assembly and disassembly, and delivery of cars to their final destination, among others costs incurred by the incumbent railroad to provide carload service. While the SARR avoids these costs for carload traffic, ATC allocates revenues as if the SARR did incur these costs and MMM assigns responsibility for stand-alone costs among shippers on the SARR, including carload shippers, as if the SARR incurred these costs [21]

BNSF's argument is wrong First, it mistakenly assumes that the SARR's costs are relevant in the revenue allocation process Second, BNSF's assertions concerning ATC cost allocation are incorrect. In its hook-and-haul service example, URCS allocates origin and destination terminal costs to the residual incumbent (assuming it is providing these services) and ATC allocates revenues based on these costs. *See*

[21] BNSF Reply at 16

Crowley/Fapp Reb VS at 25.[22] Third, in some instances, URCS may allocate inter- and intratrain ("I&I") switching costs to the SARR, which costs the SARR may not incur, but Crowley/Fapp demonstrated in their Opening statement that the impact of these costs on the variable cost allocation between the SARR and the residual incumbent is minimal, and BNSF offers no evidence to the contrary in its Reply.[23]

- BNSF argues that Coal Shippers' demonstration that I&I switching costs are not significant in the hook-and-haul traffic revenue allocation process "is beside the point."[24] A disconnect occurs, according to BNSF, "because costs associated with carload traffic that are avoided by the SARR are not limited to URCS system-average I&I switching costs."[25] However, as Crowley/Fapp explain, this demonstration is exactly the point:

> Any perceived disconnect cannot relate to differences between how the SARR and the incumbent operate since their operations are essentially the same. Where the incumbent provides overhead service, the SARR provides overhead service on the selected traffic as well. Moreover, one of the largest efficiency factors that drives the difference between costs for trainload and non-trainload traffic is interchange costs.[] But, under the STB's ATC approach, interchange costs between the incumbent and the SARR are removed from the ATC calculation so any interchange related efficiencies are eliminated The remaining primary difference

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[22] Coal Shippers also demonstrated in their Opening Submission that the terminal switching costs URCS assigns to carload traffic are more than 4.5 times greater than the terminal switching costs assigned to unit train traffic, a fact that BNSF does not dispute. *See* Crowley/Fapp Reb. VS at 25.

[23] *See* Crowley/Fapp Reb. VS at 25.

[24] BNSF Reply at 18.

[25] *Id.*

> between trainload and non-trainload costs comes back to I&I related switching costs, which we showed in our OVS has no real impact.

Crowley/Fapp Reb VS at 26.

- Finally, BNSF argues that a disconnect exists because "the incumbent's costs for the portion of the service replicated by the SARR are not accurately determined by using system-average URCS costs for the entire movement."[26] Like the UP, BNSF offers no demonstration, or expert testimony, to support its counsel's claims that URCS costs are not producing "accurate" determinations. However, BNSF appears to be interested in making movement-specific "adjustments" to URCS costs,[27] so the asserted "disconnect" appears to be simply the "disconnect" that exists in any case where, as here, the Board has directed that system average costs not be adjusted to reflect movement-specific characteristics. *See* Crowley/Fapp Reb. VS at 25-26.[28]

2. The Railroads' Filings Undercut the Board's "No Means of Correcting or Minimizing" Claim

Even if some form of "disconnect" did exist, the Board does not, as it proposes, lack any means of "correcting or minimizing the bias created by the

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[26] BNSF Reply at 17

[27] *Id.*

[28] Coal Shippers note that the Railroads submitted no expert testimony in their Opening submissions. Only the AAR submitted expert testimony on Reply, a short verified statement tendered by Michael Baranowski ("Baranowski Reply VS"). Mr. Baranowski's Reply Verified Statement devotes only one page to the subject of cross-over traffic limitations, and his testimony is limited to a conceptual discussion of cross-over traffic that neither acknowledges nor attempts to rebut Crowley/Fapp's demonstration, set forth in their Opening Verified Statement, that there was no "disconnect" using URCS Phase III variable costs in the ATC revenue allocation methodology.

disconnect" other than limiting the use of certain forms of cross-over traffic.[29] This conclusion is flatly at odds with the Board's prior statements in its *June 2011 AEPCO* decision.[30] The Railroads' Opening and Reply submissions also fail to provide any justification for the Board's "no means of correcting or minimizing" claim. To the contrary, the Railroads' submissions actually undermine the Board's claims because the Railroads concede that the Board could address any perceived "disconnects" through adjustments to URCS.

a. The Board's *June 2011 AEPCO* Decision

The most glaring omission in the Board's discussion of cross-over traffic in the *July 2012 Decision* is the Board's complete silence regarding its June 27, 2011 decision in *AEPCO*. In that prior decision, the Board explained that it was "concerned" with how the parties developed variable costs for carload and multi-car service, and the Board instructed the parties to submit revised Maximum Markup Methodology ("MMM") evidence to address the "improper costing of the traffic group discussed" in the decision:

> To develop the variable costs used to calculate the R/VC ratio for the movements in the traffic group, the parties use URCS to apply the defendant carrier's unadjusted system-average variable costs to each movement. [Major Issues, slip op at 47-48.] *In the proceeding before us, the Board is concerned with how the parties have developed the variable costs for the traffic movements on the SARR submitted by AEPCO.* Here, most of AEPCO's traffic group moves in

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[29] *See July 2012 Decision*, slip op at 16.

[30] *See Ariz. Elec. Power Coop., Inc. v. BNSF Ry. & Union Pac. R.R.*, NOR 42113 ("*AEPCO*") (STB served June 27, 2011) ("*June 2011 AEPCO*").

> trainload service, but most of the variable costs calculated for that group are costed assuming it is moved in carload and multi-car service. The defendants' evidence features this mismatch as well. In addition, defendants calculated costs based on system averages they developed for the SARR, as opposed to the defendants' own system averages. However, this approach is inconsistent with Major Issues, which stated that the Board would use defendants' own costs for this purpose. Id. As a result, neither the complainant nor the defendants have provided an MMM calculation that we can use to reach a final result. In both cases, improper costing affects the R/VC ratios and works its way into the MMM, affecting the final rate prescription.
>
> *Accordingly, AEPCO is instructed to submit revised variable costs calculations, reflecting actual operating characteristics of the movements on the SARR,* for the traffic group submitted on rebuttal, by July 11, 2011. Defendants may reply to AEPCO's evidence by 14 days after its submission AEPCO may submit a rebuttal by 7 days after the defendants' reply. Alternatively, the parties may submit joint evidence in accordance with the direction provided in this decision. *The parties' submissions should be limited to the improper costing of the traffic group discussed in this decision.*

June 2011 AEPCO, slip op. at 2 (emphasis added).

There is a profound and unexplained difference between the Board's *June 2011 AEPCO* decision and its *July 2012 Decision* in this proceeding. In its *June 2011 AEPCO* decision, the Board never suggested that it lacks any "means of correcting or minimizing the bias" associated with the Board's standard costing system. Instead, the *June 2011 AEPCO* decision identified a perceived problem in the Board's SAC methodology and directed the parties to the case to submit modifications to their existing evidence. While the modification that the Board addressed in *June 2011 AEPCO* pertained to cost calculations in the MMM process (rather than in the revenue divisions

process), the Board's expressed "concern" relates to the same carload-versus-trainload "mismatch" or "disconnect" issue that the Board identifies in the instant proceeding with respect to ATC divisions.

b. The *July 2012 Decision* Ignores *AEPCO*

Despite the similarity of the cross-over traffic issues, the Board's *July 2012 Decision* makes no reference whatsoever to the *June 2011 AEPCO* decision. Instead, the Board observes without explanation that it lacks any means of "correcting or minimizing the bias that is created by the disconnect" other than limiting shippers' use of cross-over traffic. *See July 2012 Decision*, slip op. at 16. Coal Shippers respectfully submit that the Board's failure to address its own prior decision raises serious questions regarding the merits of the Board's conclusion that it lacks any option other than precluding access to cross-over traffic. If the Board had provided some insight into its perceived inability to rectify its "disconnect" or had offered some explanation of why it believes that the approach it relied upon in *June 2011 AEPCO* would not be appropriate, Coal Shippers could have addressed that reasoning in their submissions in this case. The Board's failure to provide any explanation for its conclusion has severely limited discussion directly responsive to whatever the Board's focus may be, particularly since all indications are that the Board does indeed have the means to correct or minimize any perceived bias

c. The Railroads Contradict the Board's Claim

Even beyond this deficiency in the *July 2012 Decision*, however, the Railroads' filings in this case go one step further and affirmatively *contradict* the basis

for the Board's claim that it can only "correct[] or minimiz[e]" the bias associated with the disconnect by restricting the use of cross-over traffic.

CSXT and NS confirm in their Reply evidence that the Board is wrong to claim that it lacks any means to "correct[] or minimiz[e]" the effect of the supposed disconnect. Specifically, the eastern carriers explain that "[s]everal shipper commenters and CSXT/NS appear to be in general agreement that cross-over traffic could be allowed without additional limits, *if* revenue allocations between the SARR and the residual incumbent were done properly." CSXT/NS Reply at 21 (emphasis in original).

Similarly, BNSF explained in its Opening submission that "[i]t might be possible to correct some of the distortion arising from the use of carload traffic as cross-over traffic by adjusting the variable cost calculations used in the revenue allocation and MMM calculations." BNSF Op. at 12. BNSF added that in the *AEPCO* case, BNSF and its co-defendant, UP, "proposed such an approach."[31] BNSF goes on to state that it would be "simpler" and more "direct" to disallow the use of carload cross-over traffic, but it is evident that BNSF's submission contradicts the Board's claim that it is not possible to address the "disconnect" directly.[32]

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[31] *Id* at 12-13 (citing Defendants' July 19, 2011 Response to AEPCO's Revised Variable Cost Calculations, STB Docket No. 42113)

[32] *Id.* UP's Reply submission also at least implicitly undercuts the validity of the Board's "no means of correcting or minimizing" claim. While UP never directly addresses the question of whether the Board is correct in claiming that it lacks any alternative solution other than limiting cross-over traffic, UP nevertheless attempts to divert the issue to a discussion of whether the Board *must* modify URCS, rather than evaluating whether the Board was correct in claiming that it lacks any means of eliminating the perceived disconnect. *See* UP Reply at 5.

Thus, each of the four major railroads has either explicitly or implicitly undercut the Board's supposition that there is no way for the Board to correct or minimize the supposed disconnect other than banning certain forms of cross-over traffic

C. UP is Wrong to Claim that the Focus of SAC Cases on Core Facilities is Illusory

In their Opening submission, Coal Shippers quoted the Board's *Xcel* decision in support of the proposition that "'[p]ermitting [the shipper] to use cross-over traffic in its SAC presentation . . . keeps the SAC analysis properly focused on the core inquiry – whether the defendant railroad is earning adequate revenues on the portion of its rail system that serves the complaining shipper.'" Coal Shippers Op. at 32 (quoting *Xcel*, 7 S.T.B at 601)

In its Reply submission, UP argues that shippers (and indirectly the Board) are wrong to claim that the availability of cross-over traffic keeps the SAC analysis properly focused on the portion of the defendant's system that serves the complaining shipper. *See* UP Reply at 4. Specifically, UP claims that SAC cases fail to focus on the core facilities used to serve the complaining shipper:

> The "focus" that cross-over traffic supposedly permits is entirely illusory, because the SAC analysis must still account for every part of the defendant's system that serves the cross-over traffic – it just does so [through] a revenue allocation process . . . .

Id. UP misstates the nature of SAC traffic groups and misses the point of the Coal Shippers' argument regarding the impact of the Board's proposed limitations on the scope of SAC cases.

In particular, UP complains that the ATC revenue allocation system considers the revenues and densities of each origin-to-destination segment of a given cross-over traffic movement. To the extent that the existing revenue allocation system examines off-SARR densities on a per-segment basis, the associated burden is the result of the Board's decision to adopt ATC and was not the result of any shipper requests

But even more importantly, UP's argument overlooks the fact that if the Board requires shippers to broaden their systems to include origins and/or destinations of all SARR traffic, shippers will be forced to consider whether to add other traffic to their systems that moves only over what would be the residual incumbent in current SAC practice. *See Otter Tail*, slip op. at 8-10 (discussing the permissible inclusion of Shipper 1, Shipper 2. and Shipper 3 traffic in SAC systems).[33]

Since a complaining shipper would be required to build "core" and "non-core" facilities that together could approximate the full size of the defendant carrier, the shipper would seek to include as much "Shipper 3" traffic in its system as possible to share the fixed costs of that system. *Id.*, slip op. at 10; *see also Xcel*, 7 S.T.B. at 602 ("The cascading analysis could result eventually in a complainant having to replicate almost all of BNSF's system The scope and complexity of the proceeding would expand

[33] Shipper 2 traffic on a SARR system uses both core facilities and "secondary" facilities that are "needed to serve Shipper 2 but not used by Shipper 1." *Id.*, slip op. at 9. Shipper 3 traffic "uses only the secondary facilities and does not use the core facilities " *Id.*, slip op. at 10; *see also id.* ("A hypothetical entrant in a contestable market who has decided to serve Shipper 2 and has constructed the secondary facilities would naturally seek to serve Shipper 3 to cover some of the capital expense of those secondary facilities.").

exponentially."). In a SARR system that is truly "focused" on the core facilities (where all forms of cross-over traffic are permissible), however, a shipper will not face the same incentive to include "Shipper 3" traffic from across the defendant's entire system. Accordingly, the scope and focus of a "Full-Defendant" SARR would greatly expand beyond the scope and focus of cases under current rules. *Xcel*, 7 S.T.B. at 603 ("It is difficult to imagine the amount of materials that would have to be produced and analyzed to put together the evidence needed to design a railroad 10 times larger. The number of disputed issues would also escalate, and the operating plans and computer simulation models would become so complicated as to risk being intractable.")

In addition, UP is wrong to suggest that the 8.091 81-route mile SARR in the *DuPont*[34] case presents the same type of situation as a "Full-Defendant" SARR under the Board's proposed cross-over traffic limitations. *See* UP Reply at 3. In the *DuPont* case, the "core" facilities are very large because the 26 different commodities that make up the issue traffic move between 138 different origin-destination pairs spread out across a substantial portion of the eastern United States. (Cross-over traffic accounts for approximately 79% of the *DuPont* SARR's traffic by revenue) The effect of the Board's proposed cross-over traffic limitations would be to create "Full-Defendant" SARR systems in which the vast majority of the lines likely would *not* be part of the "core facilities" used to serve the issue traffic. In *DuPont*, the effect of the Board's proposed cross-over traffic limitations would be to expand the already large SARR to (or near) the

[34] *E.I. DuPont de Nemours & Co v Norfolk S Ry*., NOR 42125 (Complaint filed Oct. 7, 2010).

full extent of the approximately 20,183-route mile NS system As Witnesses Crowley and Fapp explain, "[i]f DuPont could not use cross-over traffic in its SARR presentation, it would need to reproduce virtually all of the NS's network." Crowley/Fapp Reb. VS at 39; *see also id.* ("Assuming the [SARR's] route miles grew in proportion to the volumes carried would mean the [SARR] would need to increase its route miles to over 18,000 miles.").

D. Banning Cross-Over Traffic Would be Particularly Inappropriate Since the Board Willingly Accepts Other Simplifying Measures

While the Board's *July 2012 Decision* suggests that the Board is concerned about exact precision on variable cost calculations for ATC purposes, the Board nevertheless insists in other contexts that an admittedly imperfect approach to other aspects of the SAC process is acceptable.

For example, in *Major Issues*, the Board adopted a hybrid system for indexing operating expenses despite the acknowledged "roughness" of the approach:

> *We acknowledge the roughness of our hybrid approach, but the inquiry itself, while necessary, is highly speculative in nature.* Just as quantifying historical productivity was a challenging undertaking, predicting productivity of the existing rail industry is far more difficult, and predicting productivity of a hypothetical SARR even more so Yet the record supports the conclusion that a hypothetical, optimally efficient SARR would achieve future productivity improvements, even modest productivity in the short term. It is the attempt to quantify the precise amount of such productivity in each year of the analysis that produces the broad array of conflicting expert testimony witnessed in this proceeding. *At some point, an elaborate and expensive search for a more precise estimate of future productivity must give way to the need for a uniform, manageable approach.* Predictability in regulation is an important goal.

Major Issues, slip op. at 46 (emphasis added).

Accordingly, it would be improper for the Board to adopt limitations on the use of cross-over traffic in SAC cases because of a concern that a simplifying device may have some measure of imprecision. *See* Crowley/Fapp Reb. VS at 29 ("As we discussed in our OVS, all models inherently incorporate some level of imprecision. If the Board cannot accept some level of imprecision in its modeling exercise, the exercise is doomed from the start."). As Witnesses Crowley and Fapp explain, "[i]f one option is to include cross-over traffic whose revenue divisions may not be absolutely precise in every instance, and the other option is to exclude the cross-over traffic entirely, it is clear that retaining the traffic, even with imperfect revenue divisions, will produce far more accurate, reliable SAC results than eliminating the traffic." *Id.*

II.

THE BOARD SHOULD NOT REPLACE MODIFIED ATC

The Board has always held that the allocation of cross-over traffic revenues between the SARR and the residual incumbent should be "reasonable and fair."[35] For many years, the Board held that reasonable allocations should be made using "market"

[35] *W Fuels Ass'n, Inc. v. BNSF Ry*, NOR 42088, slip op. at 14 (STB served Feb. 18, 2009) ("*WFA*").

principles.[36] However, starting in 2003, the Board held that reasonable revenue allocations should be based on "cost[] . . . of service" principles [37]

In its decisions starting in 2003, the Board has adopted the following cost of service principles to guide its allocation of cross-over traffic revenues.

- The costing methodology should use "the actual costs incurred by the [defendant] carrier."[38]

- The costing methodology should "reflect, to the extent practicable, the defendant carrier's relative costs of providing service over each of the two segments."[39]

- The costing methodology should "avoid illogical and unintended result[s]" that conflict with other governing principles of railroad economics.[40]

- The costing methodology should be one that can be "applied in all SAC cases, including in cases decided under [the Board's] simplified SAC procedures."[41]

Modified ATC properly implements each of the Board's governing cost of service principles. The other procedures preferred by the Railroads, and proposed Alternative ATC, do not. Under governing Board precedent, these other procedures

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[36] *See* Coal Shippers Reply at 41-42 (citing cases).

[37] *Id* at 42-51 (citing cases).

[38] *WFA 2007*, slip op. at 12.

[39] *WFA 2007*, slip op. at 11.

[40] *Id.*

[41] *WFA*, slip op. at 13 (STB served Feb. 18, 2009).

cannot be substituted for Modified ATC because they are not "demonstrably superior" to Modified ATC.[42]

Modified ATC can be improved, however, by changing the method used to calculate total fixed costs. In addition, other procedures are available that would be superior to Alternative ATC

A. Modified ATC is Superior to the Railroads' Preferred Approaches

Modified ATC is superior to the approaches supported by various Railroads, including Original ATC, SARR cost-based methods, and ECP

1. Modified ATC is Superior to Original ATC

Several Railroads contend that Original ATC should be used to set cross-over traffic divisions because, they claim, Original ATC is superior to Modified ATC.[43] However, these Railroads simply repeat arguments the Board has previously – and correctly – rejected

The Board first attempted to apply Original ATC in two pending rate cases. *WFA* and *AEP Texas*. The Board found that the application of Original ATC produced an

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[42] *WFA*, slip op. at 10 (STB served June 15, 2012). CSXT/NS argue that Modified ATC was "rejected" by the United States Court of Appeals for the District of Columbia Circuit in *BNSF Ry. v. STB*, 604 F.3d 602 (D.C. Cir. 2010) CSXT/NS Reply at 22 n.4. This assertion is manifestly wrong. The D C. Circuit remanded, without vacating, the Board's decisions in *WFA* adopting Modified ATC because the Court found that the Board had inadvertently failed to address one of BNSF's criticisms of Modified ATC. *See id.*, 602 F.3d at 613. The Board supplied this explanation in its June 15, 2012 decision in *WFA*

[43] *See* AAR Reply at 8 ("the AAR does not believe that the Board has identified a true need to modify the Original ATC methodology"); CSXT/NS Reply at 23 ("Original ATC . . . is the best allocation method the Board has proposed to date").

"illogical and unintended result" in each case – the allocation of revenues to some movements over high-density segments that were less than the incumbent carrier's variable costs for providing service over these high-density segments while, at the same time, allocating revenues that exceeded the incumbent's variable costs for providing service over the low-density segments.[44]

To avoid this "illogical and unintended result," the Board decided to apply a refined version of ATC – Modified ATC – to set cross-over traffic divisions in *WFA* and *AEP Texas* Under Modified ATC, revenues are first allocated to cover variable costs, and contribution is allocated using the Original ATC procedure.[45]

The Board concluded that Modified ATC was superior to Original ATC because it avoided these "illogical and unintended results," avoided impermissible cross-subsidies, and was fully consistent with the Board's over-riding objective of developing a "non-biased, cost-based method" to set cross-over traffic revenues:

> To avoid such an illogical and unintended result, we make a necessary refinement to the ATC approach here. Instead of applying ATC allocation procedure to total revenue, we will apply the same allocation procedure to total revenue *contribution* (i.e., revenue in excess of variable cost as calculated by URCS) . . . .
>
> This refinement is reasonable and consistent with our objective in Major Issues. Traffic must cover its variable costs before it can be expected to make any contribution to joint and common costs. Therefore, the objective is how to allocate the revenue *contribution* (if any is available) between

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[44] *See WFA 2007*, slip op. at 14; *WFA*, slip op. at 4 (STB served Feb. 29, 2008); *WFA*, slip op. at 13 (STB served Feb. 18, 2009); *AEP Texas*, slip op at 15.

[45] *Id*

> the facilities replicated by the SARR and those of the residual incumbent. While the language in Major Issues to explain the basic ATC approach led the parties to allocate total revenue rather than total revenue contribution, we did not contemplate this situation, where a procedure would result in other traffic on the SARR cross-subsidizing those cross-over movements with on-SARR revenue allocations below variable costs. Such a result would plainly conflict with our express purpose to find a non-biased, cost-based method. See Major Issues at 32.[46]

CSXT/NS argue that the Board's analysis is flawed because complainant shippers can remove low rated traffic from their traffic groups. The Board correctly rejected this argument in *WFA* and *AEP Texas* The Board ruled that "[t]he fairness of the revenue allocation method should not . require[] the complainant to drop the traffic that the incumbent railroad presumably finds worthwhile to handle at the current rate."[47] The Board also held that shippers pursuing relief under the Simplified SAC standard do not have the option of dropping low rated traffic.[48]

CSXT/NS also argue that application of ATC to low rated movements does not produce illogical results because, they assert, SARR costs are less than the incumbents' variable costs. The Board also rejected this contention in *WFA* and *AEP Texas*. The Board held that the ATC methodology must "take into account operating expenses" incurred by the defendant carrier.[49]

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[46] *WFA 2007*, slip op. at 14.

[47] *WFA*, slip op. at 4-5 (STB served Feb. 29, 2008)

[48] *WFA*, slip op. at 13 (STB served Feb. 18, 2009)

[49] *WFA*, slip op at 5 (STB served Feb 29, 2008)

Finally, CSXT and NS, like BNSF, were supporters of the Density Adjusted Revenue Allocation (DARA) methodology,[50] and the Board's discussion in *WFA* and *AEP Texas* of the inconsistent positions taken by BNSF applies equally to the positions now advocated by CSXT and NS:

> We note that BNSF's position here is inconsistent with the position it took in the Xcel case, where it advocated a revenue allocation approach called the Density Adjusted Revenue Allocation (DARA). The first step of DARA would have been to allocate revenue associated with directly attributable costs as measured by the Board's Uniform Railroad Costing System (URCS). The second step would have involved allocating contribution (total revenue less total URCS operating costs) in accordance with economies of density. BNSF argued that its approach would have allowed complainants to take advantage of economies of density, but at the same time provide for an "even-handed" allocation of revenues. It explained that "[t]he evenhandedness of DARA derives from the fact that *it assures that both on-SARR and off-SARR segments of cross-over movement will cover their attributable cost*, while giving both a comparable opportunity to cover their unattributable costs." The refinement to ATC we adopted in this case is very similar. It provides an even-handed revenue allocation by ensuring that the revenue division for both on-SARR and off-SARR segments will cover variable (i.e. attributable) costs (calculated using URCS) before allocating any remaining revenue that would be available to cover fixed (i.e. unattributable) costs.[51]

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[50] *See, e.g., Duke Energy Corp. v. Norfolk S. Ry.*, 7 S.T.B. 89, 106-08 (2003) ("*Duke/NS*"), *Duke Energy Corp. v. CSX Transp., Inc.*, 7 S.T.B. 402, 423 (2004).

[51] *WFA*, slip op. at 5 (STB served Feb. 29, 2008) (footnotes omitted) (emphasis in original)

The Board went on to hold that "the Board concluded that this second step [in DARA] was flawed in that it did not adequately account for economies of density – a flaw that we corrected with the ATC approach."[52]

2. Modified ATC is Superior to Efficient Component Pricing and Revenue Allocations Using SARR Costs

In its Opening submission, UP urged the Board to utilize ECP to allocate revenues on cross-over traffic. As Coal Shippers demonstrated in their Reply submission, the Board has repeatedly rejected ECP because "cross-over traffic could not provide any contribution to the threshold, joint and common costs" incurred by the SARR.[53] Modified ATC is superior to ECP because it does permit cross-over traffic to provide contribution to the threshold, joint and common costs incurred by the SARR.

In their Opening and Reply submissions, CSXT and NS urge the Board to set cross-over traffic revenues "us[ing] the SARR's variable costs rather than the carrier's system average URCS costs."[54] The Board has consistently rejected this approach because the costs to be used in ATC are the incumbent's costs, not the SARR's costs.[55]

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[52] *Id.* at 5 n.9.

[53] *See* Coal Shippers Reply at 18-19 n.65 (citing *Major Issues*, slip op. at 37-39 ("ECP conflicts with [SAC] theory" because, among other reasons, "cross-over traffic could not provide any contribution to the threshold, joint and common costs" incurred by the SARR)).

[54] *See* CSXT/NS Reply at 21.

[55] *See, e.g*, *WFA 2007*, slip op. at 12 ("the ATC method . . is keyed to the defendant carrier's relative costs of providing service") (internal quotation marks omitted); *AEP Texas*, slip op at 13 ("the ATC revenue allocation we use here properly focuses on determining the relative costs to the defendant carrier of handling the movement on each part of its system"); *WFA*, slip op. at 13 (STB served Feb. 18, 2009)

Modified ATC is superior to the CSXT/NS approach because it relies on the incumbent's variable costs, not the SARR's variable costs, to allocate cross-over traffic revenues.

B. Modified ATC is Superior to Alternative ATC

Coal Shippers demonstrated in their Opening submission that Modified ATC is superior to Alternative ATC because:

- Alternative ATC produces illogical and unintended results when applied to low contribution moves,

- Alternative ATC produces illogical and unintended results when applied to medium and high contribution moves;

- Modified ATC properly weights economies of density;

- It is inappropriate to give more "weight" to economies of density in the revenue allocation process; and

- Constant changing of cross-over traffic revenue allocation methodologies to decrease SARR revenues is manifestly unfair to captive coal shippers.

The Railroads offer nothing in their Replies that demonstrates that Alternative ATC is superior to Modified ATC.

("the objective of ATC is to reflect the defendant carrier's relative costs of providing service over the relevant segments of its network").

1. Alternative ATC Produces Illogical and Unintended Results When Applied to Low Contribution Moves

The Board refined and replaced Original ATC with Modified ATC because Original ATC produced "illogical and unintended result[s]"[56] when applied to low contribution moves. As Coal Shippers demonstrated in their Opening submission, these "illogical and unintended result[s]" are simply illustrated by reference to a hypothetical move where total movement revenue equals $11 per ton, total movement variable costs are $10 per ton ($5 per ton on a high-density segment and $5 per ton on a low-density segment) and, under Original ATC, $6.25 per ton was allocated to the low-density segment and $4 75 was allocated to the high-density segment. *See* Coal Shippers Op., Verified Statement of Thomas D. Crowley and Daniel L. Fapp ("Crowley/Fapp Op. VS") at 5-6.

Original ATC produces "illogical and unintended result[s]" because the high-density segment is allocated $0.25 per ton less than its variable costs whereas the low-density segment is allocated $1.25 per ton more than its variable costs. Modified ATC corrects this "illogical and unintended result" by first allocating $5 per ton in revenues to the low-density segment and $5 per ton in revenues to the high-density segment to cover each segment's variable costs, and then allocating the remaining fixed costs and profits using the ATC metric. *See* Crowley/Fapp Op. VS at 6.

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[56] *See WFA 2007*, slip op. at 14; *WFA*, slip op. at 4 (STB served Feb. 29, 2008), *WFA*, slip op at 13 (STB served Feb 18, 2009); *AEP Texas*, slip op. at 15.

Coal Shippers also demonstrated that this same hypothetical illustrates that Alternative ATC also produces "illogical and unintended result[s]." Alternative ATC would allocate $5 per ton to the low-density segment and $6 per ton to the high-density segment. The result is that the total movement contribution ($1 per ton) is allocated to the low-density segment, while $0 per ton is allocated to the high-density segment *See* Crowley/Fapp Op. VS at 7.

There is no logical reason why all movement contribution should be allocated to a low-density segment in cases where the total movement revenues exceed total movement variable costs Stated another way, the fundamental flaw the Board identified when Original ATC was applied to low contribution movements cannot be fixed by the Board's proposed back-end second step in Alternative ATC. *See* Crowley/Fapp Op. VS at 7

The Railroads do not address, much less refute, the fact that Alternative ATC produces arbitrary allocation of revenues on low rated traffic. Indeed, in this regard, Alternative ATC is worse than the DARA methodology championed by the Railroads. Under the two step DARA procedure, after revenues were allocated to cover low-density segment and high-density segment variable costs, the low-density and high-density segments were given "a comparable opportunity to cover their unattributable costs."[57]

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[57] *WFA*, slip op. at 5 (STB served Feb. 29. 2008) (internal quotation marks omitted).

Modified ATC is superior to Alternative ATC when applied to low rated movements because once revenues have been allocated to the low-density and high-density segments to cover variable costs, both segments are given "a comparable opportunity to cover their unattributable costs."[58]

2. Alternative ATC Produces Illogical and Unintended Results When Applied to Medium and High Contribution Moves

Coal Shippers also demonstrated in their Opening submission that application of Alternative ATC produces illogical and unintended results when applied to medium and high contribution moves because it fails to take into consideration scale economies: the fundamental principle of railroad economics that a carrier's profit increases as its average total cost decreases. For example, if a carrier charged $10 per ton, and the average total cost for the move was $8 per ton, it would earn a profit of $2 per ton. However, if the average total cost decreased to $6 per ton due to traffic increases, the carrier's profit would increase to $4 per ton.

In their Opening submission, Coal Shippers presented several hypothetical examples demonstrating that Modified ATC properly allocated profits in accordance with basic principles of scale economies whereas both Original ATC, and Alternative ATC, did not. One of these hypothetical examples is reproduced here:

[58] *Id.*

Crowley/Fapp Op. VS Table 3
Comparison of Revenue Division
Methodologies, Hypothetical, R/VC = 1.50

Item (1)	Original and Alternative ATC (2)	Modified ATC (3)
1. Revenue	$15.00	$15.00
2 High-Density Segment Total Costs	$6 25	$6 25
3. Low-Density Segment Total Costs	$7.50	$7.50
4. HD Segment Division	$6 82	$7 27
5 LD Segment Division	$8 18	$7 73
6. HD Segment Profit	$0 57	$1 02
7. LD Segment Profit	$0.68	$0 23
8. Result	Illogical	Logical

Crowley/Fapp Op. VS at 25.

In this example, the Modified ATC and Alternative ATC procedures were applied to a hypothetical movement with an R/VC ratio of 1.50. Application of Alternative ATC produces an "illogical" result – profits on the low-density segment ($0.68 per ton) which are higher than the profits on the high-density segment ($0.57 per ton). However, application of Modified ATC produces a "logical" result: profits on the high-density segment ($1.02 per ton) are higher than profits on the low-density segment ($0.23 per ton).

The Railroads do not, because they cannot, dispute the basic principle that profits increase as average total costs decrease. They also do not take issue with the calculations made in Coal Shippers' hypotheticals. Nevertheless, the Railroads raise several misguided diversionary arguments:

- BNSF argues that "it makes no sense to think about the relative profitability of two segments of an integrated through movement."[59] This argument is simply a recycling of the long-discredited argument that the Board cannot allocate revenues between on-SARR and off-SARR line segments of a through movement.[60] The Board certainly can calculate both the costs, and profits, associated with each segment of a through movement, in its revenue allocation procedure. Modified ATC does so in a reasonable and logical manner; Alternative ATC does not.

- The AAR argues that "profit cannot be measured by comparing revenue to variable costs for individual movements."[61] According to the AAR, a carrier earns no "economic profits" until the carrier is revenue adequate, *i.e.*, until "a railroads' revenue exceeds its total variable and total fixed costs, including its cost of capital."[62] This ridiculous definition of profitability has never been used by the Board[63] or by AAR member companies.[64]

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[59] BNSF Reply at 21.

[60] *See, e.g., Major Issues*, slip op. at 28 ("UP argues that . . there is no basis for allocating contribution from a movement among different segments").

[61] AAR Reply at 9 n.8 (internal quotations omitted).

[62] *Id.* UP makes the same argument. *See* UP Reply at 8.

[63] *See, e g , Major Issues*, slip op. at 36 (defining "'profit' from the entire movement" as "revenue in excess of variable costs").

[64] *See, e.g., Matt Rose Meets with Workforce at Town Hall*, Powder River Reflection, Sept./Oct. 2003 at 6 (BNSF CEO refers to BNSF's Powder River Basin coal traffic as "the most profitable commodity we haul"); Crowley/Fapp Reb. VS at 9-11.

Movement profitability is determined by comparing movement revenues to movement costs, regardless of the overall revenue adequacy status of the individual carrier. As Crowley/Fapp explain:

> If revenue exceeds variable costs, there is contribution. If revenue exceeds average variable costs plus average fixed costs, there must be an average profit on the movement. It is illogical and disingenuous to argue that one can calculate the average variable costs, average fixed costs and ATC for a movement, but not the profitability for that movement. Once the decision is made to allocate unattributable fixed costs to specific movements when determining ATC, one cannot unring the bell and say anything exceeding the movement's ATC is not allocated profit.[65]

- BNSF, AAR and UP argue that the Board "rejected" Coal Shippers' "profitability" arguments in *Major Issues*.[66] They specifically point to the Board's discussion in *Major Issues* where the Board stated that the mileage-based MSP revenue allocation method "allocates too much revenue to high-density lines, and not enough to lighter-density lines."[67] The Board's finding that MSP over-allocated revenues to low-density lines is not relevant to the present discussion.

Moreover, it appears what BNSF, AAR and UP are really arguing is that Modified ATC should be rejected solely because it allocates more revenues to high-density segments than Alternative ATC. However, that is not the governing test. As discussed above, the governing test is whether the revenue allocation method produces reasonable results in a manner that takes into account economies of density and does not

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[65] Crowley/Fapp Reb. VS at 11.

[66] *See* BNSF Reply at 22; *accord* AAR Reply at 9; UP Reply at 9.

[67] *Major Issues*, slip op. at 35

produce illogical results. Modified ATC is superior to Alternative ATC because it does not produce illogical allocations of movement profit on medium and high rated traffic.

- UP argues that "[i]f a complainant wants its SARR to capture the incumbent's 'profits' associated with a particular movement, it can do so by accounting for the full costs of handling that traffic from origin-to-destination on the incumbent's network."[68] Modified ATC does properly account for "the full costs of handling" cross-over traffic. However, what UP really appears to be arguing here is that shippers should eliminate cross-over traffic by building massive SARRs that provide origin-to-destination/interchange service for all traffic group members. That approach would vitiate SAC as a viable regulatory remedy for most (if not all) coal shippers.

3. Modified ATC Properly Weights Economies of Density

The two step Modified ATC method first allocates movement revenue to cover variable costs, and then allocates contribution using ATC The first step in Modified ATC uses variable costs as the allocation metric because variable costs are not sensitive to economies of density.[69] The second step allocates movement contribution using ATC.

BNSF argues that "[b]y taking account of variable costs in both steps, Modified ATC undeniably gives undue weight to variable costs and dilutes the impact of

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[68] UP Reply at 9-10.

[69] *See* Crowley/Fapp Op. VS at 14.

economies of density "[70] BNSF's contentions here are wrong. Modified ATC gives proper weight to variable costs and does not "dilute" economies of density.

As BNSF itself has long recognized, cross-over traffic revenue allocation should be a two-step procedure.[71] Under step one, revenues are allocated to cover variable costs The proper metric to make this allocation is variable costs. It is improper to use a density metric in step one because variable costs do not change based on changes in density. Modified ATC properly utilizes variable costs in Step 1.

In step two, contribution is allocated using ATC. ATC takes into account economies of density and diminishing returns thereto. ATC must contain a variable cost component because the variable cost serves as the constant to measure diminishing economies of density, *i.e.*, as densities increase, the fixed cost per ton declines, while the variable cost per ton remains the same.[72]

Modified ATC's two step revenue allocation procedure, including its weighting of variable costs, is superior to the Alternative ATC's two step procedure because, unlike Alternative ATC, Modified ATC produces reasonable, logical revenue allocations when applied to low, medium and high rated traffic movements.

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[70] BNSF Reply at 20.

[71] *See WFA*, slip op. at 5 (STB served Feb. 29, 2008).

[72] *See* Crowley/Fapp Op VS at 12 BNSF argues that "economies of density . . . are reflected only in fixed costs." BNSF Reply at 18. This argument is the same argument that BNSF made in support of DARA, and which the Board properly rejected. *See WFA*, slip op. at 5 (STB served Feb. 29, 2008). Proper measurement of economies of density must reflect diminishing returns thereto, which requires inclusion of a variable cost component. *See id* at 5 n.9.

4. It is Inappropriate to Give More "Weight" to Economies of Density in the Revenue Allocation Process

The Railroads argue that Modified ATC should be adopted because it gives more weight to economies of density. This increased weighting comes about, according to the Railroads, because Alternative ATC applies the ATC metric to total movement revenue (subject to some exceptions) whereas Modified ATC applies the ATC metric only to movement contribution.

The Railroads argue that it is appropriate to give more weight to economies of density because, all other things being equal, Alternative ATC will allocate more revenue to low-density segments than Modified ATC. This is critically important because, the Railroads contend, application of Modified ATC will "leav[e] lower density lines, which are necessary to support the cross-over traffic, without sufficient revenue to cover their costs."[73]

The Railroads cite no empirical evidence to support their claim that application of Modified ATC has, or will, result in the allocation of revenues to low-density segments that do not cover low-density segment costs. The fact that Modified ATC may allocate less revenues to low-density lines does not mean that the revenue allocation will be insufficient to cover low-density segment costs. It just means that it will be allocated less revenue *See* Crowley/Fapp Reb. VS at 8.

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[73] UP Reply at 10 n.8. *Accord* BNSF Reply at 18-19; AAR Reply at 9-10, Baranowski Reply VS at 11; CSXT/NS Reply at 24

Moreover, as Coal Shippers have emphasized throughout this proceeding, none of the ATC procedures is allocating costs.[74] The procedures use cost metrics to allocate revenues. The amount of revenue allocated to low-density lines – and the ensuing amount of cost coverage – necessarily turns on many factors other than the allocation metric, including: the composition of the traffic group, the level of real world revenues being charged to members of that traffic group and the low-density line costs.[75]

In the end, the Railroads' argument boils down to the proposition that the Board should adopt Alternative ATC for one reason and one reason alone: it allocates more revenue to low-density segments.[76] However, that is not the governing standard here. Modified ATC is superior to Alternative ATC because it reasonably takes into account economies of density, and produces logical revenue allocations that conform to all governing economic principles.

5. Constant Changing of Cross-Over Traffic Revenue Allocation Methodologies to Decrease SARR Revenues is Manifestly Unfair to Captive Coal Shippers

AAR argues that the Board's constant changing of cross-over traffic revenue allocation methodologies is a wise regulatory practice because "it appears that the Board has simply attempted to improve its revenue-allocation methodology."[77] The

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[74] *See, e.g.*, Crowley/Fapp Reb. VS at 8.

[75] *Id.*

[76] *See, e g.*, CSXT/NS Reply at 24.

[77] AAR Reply at 12.

Board's proposed Alternative ATC approach is not an improvement but a major step backward in equitably allocating cross-over traffic revenues.

In addition, it is very important for shippers to know – before they start configuring their SARRs – what cross-over traffic revenue allocation methodology will be employed in their case. Without this knowledge, shippers simply cannot model SARRs that "maximize revenues while minimizing costs."[78] Constant changing of revenue allocation methods prevents shippers from "knowing the rules of the game," and requires substantial expenditures of time, effort and cost in proceedings such as this one.

C Suggested Alternatives

In their Opening submission, Coal Shippers asked the Board to find that Modified ATC was superior to Alternative ATC. Coal Shippers also proposed a correction to Modified ATC – Corrected Modified ATC – that would improve the accuracy of Modified ATC's calculation of total fixed costs. If the Board decided not to continue to use Modified ATC or Corrected Modified ATC, Coal Shippers proposed two other cross-over traffic revenue allocation approaches. Three Step ATC and Variable Cost Allocation.

The Railroads object to each of these proposed alternatives. Their objections are without merit.

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[78] *See, e.g , Wis. Power & Light Co. v. Union Pac. R.R* , 5 S.T.B. 955, 965 n.20 (2001); *Duke/NS*, 7 S.T.B. at 98 n.11.

1. Corrected Modified ATC

Corrected Modified ATC makes a simple and necessary change to Modified ATC: it corrects the Board's erroneous assumption that high-density lines and low-density lines have the same fixed costs per route-mile.[79]

Corrected Modified ATC allocates higher total fixed costs to higher density rail lines and lower total fixed costs to lower density rail lines. This correction is accomplished by calculating system average fixed costs per track mile. This system average fixed cost per track mile would then be applied to the miles of track along each segment and divided by the segment's annual tons to develop a fixed average cost per ton.

The logic behind Corrected Modified ATC is simple and straight-forward. High-cost, high-density segments invariably have more track-miles than low-density segments, as high-density segments are double, triple and sometimes quadruple tracked, whereas low-density segments may consist of only single track. Allocation of total system fixed costs on a track-mile basis would produce the intended result: high-density segments would be allocated more total fixed costs per route mile than low-density segments because high-density segments have more track miles. *See* Crowley/Fapp Op. VS at 34-35.

- AAR argues that fixed costs are "the same on average for light-density as for heavy-density lines."[80] While fixed costs would not vary with output, the

[79] Coal Shippers explained in their Opening why the Board's decision to use route miles in ATC was incorrect and should be revised. *See* Coal Shippers Op. at 69-72.

allocation of fixed costs will vary by location. *See* Crowley/Fapp Reb. VS at 14. For example, the fixed costs on a quadruple track line in the Powder River Basin will be higher than those on a single track branch line

- AAR argues that the Board held in *Major Issues* that fixed costs are the same on light and heavy density lines.[81] The AAR does not address the fact that prior to *Major Issues* the Board reached the opposite result, *i.e.*, fixed costs are higher on heavy density lines.[82] Coal Shippers are asking the Board in this proceeding to revisit this issue based upon the detailed record in this proceeding, and upon reconsideration, to adhere to the Board's earlier, and Coal Shippers submit, correct resolution of this issue

- AAR argues that "even assuming *arguendo* that fixed costs did vary with density, 'Correct' Modified ATC would overstate revenues for high density line segments because many types of fixed costs are not associated with track miles, and because even investment that is associated with track miles does not increase linearly with the number of track miles."[83] AAR is simply nitpicking here. Between 78 to 88% of URCS fixed cost categories are associated directly or indirectly with track miles,[84] and even in the absence of perfect linearity, road property investment and fixed cost elements will vary by the number of tracks in a given location.[85] For example, a double track

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[80] AAR Reply at 11.

[81] *Id.*

[82] *See* Coal Shippers Op at 69-70.

[83] AAR Reply at 11.

[84] *See* Crowley/Fapp Reb. VS at 16.

[85] *Id* at 16-17.

location may cost something less than two single track locations due to certain economies that might be realized, but there is no doubt that a multiple track location will have greater fixed costs than a single track location. *See, e.g., Duke/NS*, 7 S T.B. at 108.

2. Three Step ATC

On Opening. Coal Shippers presented Three Step ATC as an alternative that is superior to Alternative ATC. Step 1 allocates revenues to cover the on-SARR and off-SARR URCS Phase III variable costs. Step 2 allocates revenues to cover on-SARR and off-SARR fixed costs using an allocation of total system fixed costs on a track mile basis. Step 3 allocates any remaining revenue on a variable cost basis Three Step ATC is intended to address the fact that revenues are used by rational firms for three prioritized purposes: coverage of variable costs; coverage of fixed costs, and generation of profit (defined here as excess revenue above total cost).[86]

The AAR argues that Three Step ATC is flawed because it "conflict[s] with the Board's determination that cross-over traffic revenue should be allocated on the basis of average total costs."[87] Under this logic, only Original ATC should be used to set cross-over traffic divisions. The Board rejected this logic in both *WFA* and *AEP Texas*. The governing principal here is not adherence to Original ATC, but, instead, the adoption and use of cross-over traffic revenue allocations that are reasonable, take into account economies of density, and do not produce absurd results.

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[86] *See* Crowley/Fapp Op. at 31-38

[87] AAR Reply at 11.

3. Variable Cost Allocation

In their Opening submission, Coal Shippers observed that the Board had adopted Original ATC in *Major Issues* because the Board believed that economies of density had not been exhausted in the railroad industry.[88] Coal Shippers further observed that the Board's own consultants had determined in a recent study – the *Christensen Updated Report* – that economies of density in the rail industry had been exhausted.[89] In light of these new developments, Coal Shippers proposed a very simple Variable Cost Allocation Method that utilizes the Board's URCS Phase III program to allocate cross-over traffic revenues

- AAR argues that the *Christensen Updated Report* is not relevant because it "focused on railroads as a whole, not individual line segments included in a rate complaint."[90] However, the Board itself "focused on railroads as a whole" when it decided to stop using the mileage-based MSP cross-over traffic revenue allocation procedure. As the Board stated in *Major Issues*:

> The MSP approach allocates revenues according to a crude estimate of the relative variable costs of hauling the traffic over the *relevant segments*, rather than the total costs. The approach therefore fails to take into account the defining characteristic of the railroad industry – economies of scale, scope and density. *There is no reason to believe that economies of density in this industry have been exhausted Yet*

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[88] *See* Coal Shippers Op. at 73-74.

[89] *Id*, citing Laurits R. Christensen & Associates, Inc., *An Update to the Study of Competition in the U.S. Freight Railroad Industry* (Jan. 2010) ("*Christensen Updated Report*") at 4-13.

[90] AAR Reply at 12.

only under such an assumption would a mileage-based approach provide an allocation based on average total costs.

Id., slip op. at 25 (emphasis modified) (footnotes omitted).

Moreover, the industry is comprised of the sum of its parts. If, as the *Christensen Updated Report* found, economics of density have been exhausted on an industry level, the vast majority of rail lines must have exhausted available economics of density, including major rail lines used by most coal shippers.

- AAR argues that "[i]f there were no remaining economies of density, complainants would have no incentive to select a SARR route that departs from the incumbent's route to take advantage of economies of density."[91] The AAR is jumbling concepts here. A SARR is a hypothetical construct that is designed in part to "take advantage of economies of density." How a SARR is constructed says nothing about whether economies of density have been exhausted on real-world railroad lines.[92]

III.

OTHER MATTERS

A. The Board's Proposed Changes to Simplified SAC and the Three-Benchmark Test Are Insufficient

As Coal Shippers have explained in their prior filings, the Board should abolish rate caps in Simplified-SAC cases, should allow 10-year rate prescriptions, and

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[91] AAR Reply at 12 (internal quotation marks and citation omitted)

[92] *See* Crowley/Fapp Reb. VS at 21. In addition, even when economies of density are exhausted, there can be logical reasons to reroute traffic, including greater revenue potential on other line segments due to a different traffic mix. *Id.* at 21-22.

should retain the current RPI calculation procedures. The Board should also abolish rate caps, and should allow 10-year rate prescriptions, in Three-Benchmark cases.

Coal Shippers noted in their Reply submission that while the Railroads offered a variety of arguments with regard to Simplified-SAC and Three-Benchmark, "the bottom line is clear: the railroads have no interest in any changes to the Board's current regulatory policies that would help captive shippers." Coal Shippers Op. at 22-23. The Railroads' Reply filings maintain this same approach, suggesting that relief in Simplified-SAC and Three-Benchmark cases must be capped because those approaches are too "crude" (CSXT/NS Reply at 25), "less accurate" (BNSF Reply at 5-6), and "will never be as accurate as a Full-SAC test." UP Reply at 12

The Board recognized in its *July 2012 Decision* that its goal of providing a simplified approach to rate relief was not being met. *See July 2012 Decision*, slip op. at 3 ("During [Ex Parte No. 705], we heard concerns from stakeholders that the complexity, high litigation costs, and current limits on relief for simplified alternatives were dissuading parties from bringing rate disputes to this agency."); *id.* ("Our goal is to encourage shippers to use a simplified alternative to a Full-SAC analysis that is economically sound, yet provides a less complicated and less expensive way to challenge freight rates by discarding the requirement that shippers design a hypothetical railroad to judge a railroad's real world rates."). Deferring to the Railroads' concerns about limited accuracy and downward rate "ratcheting" will not allow the Board to meet its stated goal.

Coal Shippers have explained that it is unlikely that shippers will bring Simplified-SAC and Three Benchmark cases even with the changes proposed by the

Board. *See* Coal Shippers Op. at 74-77; Coal Shippers Reply at 19-23. Eliminating the rate caps and extending the period of rate relief – while maintaining the current RPI approach – could provide some limited incentive for shippers to bring Simplified SAC or Three Benchmark cases, when confronted with excessive railroad rate demands.[93]

B. Interest on Reparation Awards Should be Increased

The Board proposes to raise the interest rate on shipper reparations from the 90-day United States Treasury bill rate (which approximates 0% in the current environment) to the prime rate (approximately 3.25% at the current time).

In their Opening submissions, Coal Shippers supported the Board's proposal because use of the prime rate is reasonable and consistent with FERC's longstanding practice of using the prime rate to set interest on refunds required to be made by FERC- regulated companies.[94] Coal Shippers also emphasized that interest on reparations in a Full-SAC case may become a moot point if the Board adopts its proposed Full-SAC proposals.

The AAR argues that the Board should not follow FERC practice because "FERC administers a different regulatory regime and its rate-making authorities are more comprehensive than the Board."[95] In fact, as pertinent here, both FERC and the STB

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[93] All shippers filing Reply submissions agree *See, e.g.*, Chlorine Shippers Reply at 1; Grain Shippers Reply at 2-3; Chemical Shippers Reply at 7-9; ARC Reply at 3-5; CURE Reply at 11-19.

[91] *Rate of Interest on Amounts Held Subject to Refund, Order Clarifying Order Nos 47 and 47-A*, 45 Fed. Reg 3888 (Jan 21, 1980) (codified at 18 C.F.R. § 35.19a).

[95] AAR Reply at 19.

have the statutory authority to order regulated entities to pay refunds to their customers,[96] and both face the identical issue: what interest rates should apply on these refund awards.

The AAR also argues that the United States Court of Appeals for the Fifth Circuit "did not endorse" FERC's choice of the prime rate in its decision affirming that choice.[97] In fact, the Court emphasized that FERC's choice of the prime rate was "eminently reasonable"[98] and the portions of the decision cited by the AAR dealt with the Court's rejection of arguments made by gas pipelines and natural gas producers that FERC erred in not setting "a lower rate of interest" tied to "U.S. Treasury Note" yields.[99]

CSXT/NS claim that the Board should not adopt the prime rate because, they assert, there is no evidence that the prime rate accurately reflects real market-based interest rates.[100] CSXT/NS's assertion that banks can charge rates "at, above, or below" the Prime Rate (*see* CSXT/NS Reply at 33 n.9) does not undermine the basis of the Board's proposal. The Board is simply recognizing that the Prime Rate "may serve as a more appropriate rate" for calculating interest owed to shippers than Treasury Bill

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[96] *See, e.g.*, 15 U.S.C. § 717c(c) (FERC may order refunds if it finds a proposed rate exceeds a reasonable maximum); 49 U.S.C. § 11704(b) (STB shall award reparations if it finds a rate exceeds a reasonable maximum).

[97] AAR Reply at 19, citing *United Gas Pipeline v. FERC*, 657 F.2d 790 (5th Cir. 1981) ("*United Gas Pipeline*").

[98] *United Gas Pipeline*, 657 F.2d at 794.

[99] *Id.* at 795.

[100] *See* CSXT/NS Reply at 33-34 ("The assertion that the WSJ Prime Rate is the rate banks charge 'their most creditworthy customers' (NPRM at 18) is often repeated, but is simply incorrect.") (footnote omitted).

rates.[101] FERC's long-standing use of the Prime Rate provides abundant support for the Board's determination

C. The Board Has Failed to Comply with the Regulatory Flexibility Act

In their Opening submission, Coal Shippers demonstrated that the Board had misconstrued and failed to comply with the Regulatory Flexibility Act. *See* Coal Shippers Op at 77-79 ("Since the requirements of the rule apply directly to shippers, some of whom are small, the Board's certification is defective, and the Board's *July 2012 Decision* fails to comply with the requirements of the RFA, which precludes adoption of the proposed Full-SAC and Simplified SAC procedures."). Neither the AAR nor any individual Railroad submitted a reply to Coal Shippers' demonstration.

[101] *July 2012 Decision*, slip op. at 18.

CONCLUSION

Coal Shippers respectfully request that the Board decide the issues raised in this proceeding in the manner described in their Opening, Reply, and Rebuttal submissions.

Respectfully submitted,

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Dated. January 7, 2013

CERTIFICATE OF SERVICE

I hereby certify that this 7th day of January, 2013, I have caused a copy of the foregoing to be served via first-class mail, postage prepaid, upon the parties of record to this case.

Andrew B. Kolesar III

BEFORE THE
SURFACE TRANSPORTATION BOARD

Docket No. EP 715	)	**Rate Regulation Reforms**

Rebuttal
Verified Statement

Of
Thomas D. Crowley
President

And
Daniel L. Fapp
Vice President

L. E Peabody & Associates, Inc.
On Behalf Of

Western Coal Traffic League, Concerned Captive Coal Shippers, American Public Power Association, Edison Electric Institute, The National Rural Electric Cooperative Association, Western Fuels Association, Inc , and Basin Electric Power Cooperative, Inc.

Filed: January 7, 2013

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I. INTRODUCTION

We are Thomas D. Crowley and Daniel L. Fapp. We are the same Thomas D. Crowley and Daniel L Fapp that submitted an Opening Verified Statement in this proceeding on October 23, 2012. Copies of our credentials are included as Exhibit No. 1 and Exhibit No. 2 to our Opening Verified Statement, respectively. Our Opening Verified Statement ("OVS") addressed the Surface Transportation Board's ("STB" or "Board") proposal to modify its rules related to various aspects of its three maximum rate procedures as identified in *EP 715*.[1]

We have been requested by Counsel for the Western Coal Traffic League ("WCTL"), Concerned Captive Coal Shippers ("CCCS"), American Public Power Association ("APPA"), the National Rural Electric Cooperative Association ("NRECA"), Western Fuels Association, Inc. ("Western Fuels"), and Basin Electric Power Cooperative, Inc ("Basin Electric") (collectively "Coal Shippers"), to address the December 7, 2012 Reply Comments of the Union Pacific Railroad Company's ("UP"), the BNSF Railway Company's ("BNSF"), the Association of American Railroads ("AAR"), including the Reply Verified Statement of Michael Baranowski ("Baranowski VS"), and the Joint Reply Comments of the CSX Transportation Company, Inc. and the Norfolk Southern Railway Company ("CSXT/NS"). We shall refer to UP, BNSF, AAR and CSXT/NS collectively as ("the Railroads")

The results of our review are summarized in the remainder of this Rebuttal Verified Statement and are organized under the following topical headings:

II. Revenue Divisions
III. Cross-Over Restrictions
IV. Conclusions

[1] STB Docket No. *EP 715, Rate Regulation Reforms,* decided July 25, 2012 (*EP 715*)

II. REVENUE DIVISIONS

In our OVS, we demonstrated that the STB's initial concerns that the application of the Original ATC formula resulted in over allocation of revenues to low-density lines were valid. Specifically, we demonstrated that Original ATC transforms movements for which real-world revenues do not exceed their end-to-end URCS variable costs (i.e., movements that make no contribution to defray the incumbents' joint and common costs) into movements that make a contribution to defray the low-density segment's joint and common costs, while simultaneously failing to cover the high-density segment's variable costs. In other words, Original ATC unfairly benefits low-density segments to the disadvantage of the high-density segment The application of Modified ATC eliminated this glaring shortcoming inherent to Original ATC.

While we acknowledged in our OVS that the proposed Alternate ATC formula would partially correct this particular problem, we also showed that its application can lead to illogical results on both low rated and high rated moves Specifically, application of Alternate ATC on low rated moves where revenues slightly exceed variable costs can result in the illogical result where all movement contribution is allocated to the low density segment. Similarly, application of Alternative ATC on high-rated movements produces the counterintuitive result that the low-density segment earns more per-mile profit than the high-density segment after both segments have recovered their full (variable plus fixed) costs.

The Railroads individually and collectively replied to our OVS with several unfounded and unsupported criticisms, and mischaracterizations of our evidence. We respond to the Railroads' critique below.

A. ALTERNATE ATC FAILS TO ADDRESS THE BOARD'S ORIGINAL INTENT IN *MAJOR ISSUES*

In its reply comments, AAR cites *Major Issues*[2] in support of the use of Original ATC or Alternate ATC over Modified ATC:

> "By allocating revenues based on average total cost, the Board's intent was to ensure that low density line segments, with their higher average total costs, are allocated relatively more revenue from each individual movement than the high density segments, because low density segments have fewer movements to help cover the fixed costs."[3]

What the AAR failed to mention, however, is that all three ATC formulae meet this requirement. Low-density segments are allocated relatively more revenue than the corresponding high-density segments under Modified ATC just as they are under Original and Alternate ATC The key difference is that Modified ATC makes this allocation while simultaneously adhering to other important economic principals. Original and Alternate ATC do not.

AAR further claims that "Modified ATC . fails to achieve the Board's goals in allocating cross-over traffic revenue in relation to the defendant carrier's relative costs of providing service"[4] In actuality, Modified ATC ensures that all segments' variable costs are covered before allocating revenues to defray joint and common costs to any segment. Original ATC does not. Moreover, Modified ATC ensures that revenues in excess of variable plus allocated fixed costs are allocated in a reasonable, equitable, and rational manner. Once again, Alternate ATC does not.

In a series of decisions following *Major Issues*, the Board has made clear that its intent in *Major Issues* was to adopt a revenue allocation methodology that (i) reasonably allocated

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[2] STB Ex Parte No 657 (Sub-No. 1), *Major Issues In Rail Rate Cases*, served October 30, 2006 ("*Major Issues*")
[3] AAR Reply Comments, p. 10
[4] AAR Reply Comments, p. 9.

revenues between high density and low density segments, (ii) used the incumbent carrier's costs in making the revenue allocation, (iii) took into account economies of density; (iv) did not produce illogical or unintended results when measured by other basic principles of railroad economics; and (v) was suitable for use in both Full-Stand-Alone Cost ("SAC") and Simplified SAC cases.[5] Modified ATC meets each of these objectives, but as we explained in detail in our OVS, Alternative ATC does not.

B. ORIGINAL AND ALTERNATE ATC SYSTEMATICALLY BIAS THE REVENUE DIVISION RESULTS IN FAVOR OF LIGHT DENSITY SEGMENTS

The AAR claims that Modified ATC "systematically biases revenue allocation in favor of high-density segments, apportioning them a larger share of revenues than is warranted."[6] BNSF makes a similar claim at page 3 of its Reply Comments, while also restating on page 16 of its Reply Comments that Modified ATC "double counts" variable costs. UP makes a similar assertions at page 10 of its Reply Comments regarding alleged biases in Modified ATC, while also claiming that we never demonstrated Modified ATC would leave sufficient revenue for off-SARR movements to cover their costs.

These statements are incorrect and inconsistent with the demonstrations we made in our OVS. Modified ATC does not bias revenue allocation because it produces reasonable and predictable results when applied to the entire universe of railroad movements In contrast, both Original and Alternate ATC display clear bias when applied to nearly all railroad movements Original ATC is demonstrably biased in favor of low-density segments when applied to low-

[5] *See, e g , Western Fuels Ass'n Inc , and Basin Electric Power Cooperative v. BNSF Ry Co* , STB Docket No 42088 (STB Decision served Sept 10, 2007) at 11-14, (STB Decision served on Feb 29, 2008) at 4-5; (STB Decision served Feb. 18, 2009 at 12-15, and (STB Decision served June 15, 2012) at 6-10

[6] AAR Reply Comments, p 8.

rated movements, and Alternate ATC is demonstrably biased in favor of low-density segments when applied to some low-rated, and all high-rated movements [7]

Indeed, the fact that Alternate ATC is being considered as a viable replacement for Original ATC is a classic example of detection bias. Detection bias arises when a narrow segment of the population is observed.[8] When Alternate ATC is applied to the low-rated movements for which Original ATC is known to be a problem, it appears to be a viable solution to the problem However, when Alternate ATC is applied to the full population of railroad moves it becomes apparent that while Alternate ATC effectively masks the bias inherent in the Original ATC on a narrow band of movements, it does not mask the bias on some low-rated and all high-rated movements.

In our OVS, we demonstrated that Alternate ATC does not fully address the Original ATC formula shortcomings (bias), but rather hides them when applied to a narrow segment of the overall railroad movement population. When the STB first discovered the bias inherent in the Original ATC formula, it developed a sound remedy for the unforeseen problem – the Modified ATC formula. There is no need or justification for abandoning Modified ATC for an obviously flawed Alternate ATC. The AAR simply wishes for low-density segments to be allocated as much revenue as possible. It has not, nor can it demonstrate that any specific amount of revenue is "warranted" on any move or set of moves

BNSF goes further and also makes a half-hearted attempt to discredit the demonstration in our OVS that Alternate ATC "over weights" the fixed cost component of ATC as revenues increase. Specifically, BNSF states that:

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[7] See OVS, pp 22-23

[8] The classic example involves diabetes and obesity. Doctors are more likely to screen for diabetes in patients who are overweight than in patients who are not. The skewed detection efforts lead to inflated diabetes rates among obese patients and deflated diabetes rates among patients who are not obese.

> "Some of the [Crowley/Fapp] Tables are pure nonsense. Table 2 of Crowley/Fapp purports to show that Alternative ATC "overweights" fixed costs by comparing the extent to which fixed cost are a percentage of total costs to the extent to which fixed costs are a percentage of revenue. This invented metric is meaningless The fact that fixed costs become a smaller percentage of revenue as revenues increase above total costs is not an indication of "overweighting." Although the Table does not report it, the same effect occurs with variable costs. as revenues increase above total costs, variable costs also become a smaller percentage of revenue. Messrs. Crowley and Fapp have therefore "demonstrated" that *both* fixed and variable costs are "overweighted."[9]

BNSF distorts our position. We are not demonstrating that "*both* fixed and variable costs are 'overweighted.'" On the contrary, we are demonstrating that fixed costs are over weighted while variable costs are *underweighted.* Since there are only two components being "weighted" in the formula. if one is over weighted then the other is necessarily under weighted. As the text surrounding the table in question makes clear, variable costs provide for a much more reasonable allocation metric than fixed costs to allocate the portion of revenues in excess of total costs. We show that after revenues up to total costs have been allocated, there is no longer any need to consider fixed costs, and in fact by doing so the results are demonstrably biased in favor of the low-density segment. Therefore, for any movement with revenues in excess of total costs, both Original and Alternate ATC, and to a lesser extent even Modified ATC, over weights fixed costs

BNSF also restates its claim that Modified ATC "double counts" variable costs. As we explained in our OVS, the double count contention is incorrect from an economic perspective because the purpose of Modified ATC is not to allocate (or weight) costs, but instead to equitably allocate revenues between the on-SARR and off-SARR portions in a reasonable and logical manner [10] Modified ATC is based on the simple and singular premise that the revenue required to cover variable costs associated with a given movement must be allocated between the

[9] BNSF Reply Comments, p 21, note 40.
[10] See OVS, pp. 15-18

on-SARR and off-SARR portions of the movement before any contribution may be allocated. Only when variable costs are covered can revenues above this level be considered.

Importantly, the second step of Modified ATC does not consider only the relative average fixed costs of the two segments. This is correct because the second step of Modified ATC is not intended to allocate average fixed costs between the parties – it is intended to allocate contribution, which includes both fixed costs and revenues in excess of ATC using a metric that accounts for economies of density and diminishing returns thereto. It would be inappropriate and theoretically unsound to allocate contribution based solely on the relative fixed costs of the two segments in question

Finally, UP makes the claim that all of the examples we included in our OVS relied upon single movements, and that we failed to show the impact of the different revenue division methodologies when applied to all the cross-over traffic in a particular case [11] UP believes if the off-SARR impact was viewed on an aggregate basis, it would show that the off-SARR revenues would be insufficient to cover the segments' costs.

UP's argument is nothing but a red herring for two reasons. First, the underlying assumption of UP's argument appears to be the only traffic that moves over an incumbent's residual line segments in a SAC case is cross-over traffic, and this cross-over traffic is responsible for all off-SARR segments' costs. Such an assumption is false. The residual incumbent can have other traffic moving over off-SARR segments that never moved on the SARR, and which would contribute to the joint and common costs of these off-SARR segments In other words, other traffic is also contributing to these off-SARR segments and there is no way to test whether an off-SARR line segments' costs are fully covered without looking at all the traffic on those segments, including cross-over traffic coming of the SARR and traffic that never

[11] See UP Reply Comments, p 10, n 8.

moves on the SARR [12] The practical way to evaluate the impact of different revenue allocation processes is through individual movements as we did in our OVS.

Second . UP presents no empirical evidence demonstrating that application of Modified ATC, or the other alternatives to Original ATC and Alternative ATC we discussed in our OVS, to individual results in these movements not contributing sufficient revenues to cover a fair share of their off-SARR costs. It is important to emphasize here, as we did in our OVS, that Modified ATC, and the other cost-based methods under discussion in this proceeding, are not allocating variable or fixed costs, but instead are using cost-based metrics to allocate real-world railroad revenues [13] The amount of revenue being allocated depends not just on the cost-based allocation metric, but the total amount of real-world revenue that is being allocated using the metric The fact that Modified ATC does not allocate as much revenue on through movements with R/VC ratios greater than 1 00 to low density lines (which can be residual incumbent lines) as Original or Alternative ACT does not mean that Modified ATC allocates insufficient revenues to cover a fair share of the costs associated with transporting the cross-over traffic on that segment, it just means that it allocates less revenue than Original or Alternative ACT'S.

C. THE RAILROADS' CHARACTERIZATION OF OUR PROFITABILITY ANALYSIS IS ERRONEOUS

In an attempt to discredit our Opening statements and supporting analyses, the Railroads repeatedly mischaracterize our statements. For example, Mr. Baranowski states that after a movement's calculated fixed cost allocation has been covered, "The remaining contribution

[12] It is for the same reason the STB found that requiring a shipper to construct a SARR without using cross-over traffic would quickly devolve to requiring the shipper to recreate nearly the incumbent's entire system. As additional traffic is added, it would become necessary to test the down-stream impacts of that additional traffic until ending up in a cascading effect of testing the impact on the incumbent's entire network

[13] See OVS, P. 17.

above variable cost – which Crowley/Fapp refer to as 'profit' (but is really contribution to fixed costs)."[14] Mr. Baranowski goes on:

> "The revenues that a railroad earns on a movement in excess of the movement's variable costs are not a railroad's 'economic profits.' They are the movement's contribution towards the railroad's fixed costs. If and only if a railroads' revenue exceeds its total variable and total fixed costs, including its cost of capital, does a railroad earn an economic profit. Thus, "profit" cannot be measured by comparing revenue to variable costs for individual movements."[15]

The problem with Mr Baranowski's statement is two-fold. First, it is inconsistent with the Railroads' prior statements about the profitability of individual and collective movements. All of the Railroads have made numerous statements about the profitability of individual or collective commodity movements.[16] For example BNSF President and CEO Matthew Rose called the BNSF's PRB coal movements "the most profitable commodity we haul."[17] UP (then CEO Richard Davison) made a similar comment about UP's coal movements:

> " ..based on our all in cost, capital requirement, whatever else goes into it to meet an acceptable profitability standard for us. As I said many, many times coal was the second most profitable commodity we handle."[18]

The western Class I railroads are not the only railroads making profitability claims about specific traffic. Their eastern counterparts CSXT and NS are also measuring profits on individual

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[14] Baranowski VS, p 9 See also related statements at AAR Reply Comments, p. 9; BNSF Reply Comments, pp 19-22, UP Reply Comments, pp. 8-9.

[15] Baranowski VS, p 9, fn 7. We note that Mr Baranowski is in effect saying that a rail carrier earns no economic profits until the carrier achieves "revenue adequacy" as generally defined by the Board.

[16] Baranowski's reference to "economic profit" is really just an attempt to misdirect the Board All of the ATC division methodologies we discussed in our OVS use the STB's URCS Phase III variable costs, which includes the current railroad industry cost of capital in the return on investment components of the variable cost estimation.

[17] Matt Rose Meets with Workforce at Town Hall, Powder River Reflection, Sept./Oct. 2003 at page 6.

[18] 3Q 2003 Union Pacific Earnings Conference Call – Final, Newsroom, Financial Disclosure Wire, October 23, 2003 at page 8

movements and commodity groups. In discussing its coal business, NS Chief Marketing Officer and Executive Vice President Donald Seale stated:

> "And, I'll give you a couple more examples of that is in the fourth quarter alone, we handled an increase of about 5,000 carloads of additional coke and iron ore traffic It's good business, and it's very profitable business for us. ."[19]

Mr. Seale stated in a later conference call that specific intermodal movements are also very profitable for the NS

> In intermodal, and let me take that first. In intermodal, as I've mentioned in my comments, we continue to have increased local Eastern highway conversions that tend to be shorter-haul, profitable business...[20]

CSXT CEO Michael Ward also had similar comments about the railroad's highly profitable domestic and export coal business:

> This is Michael, let me address that one, Matt. As we look, we look at -- we love our Coal business, we love our Export Coal business and we love our Utility Coal business. I think you're right, there was a misperception out there in the marketplace that somehow that Export Coal was extraordinarily profitable versus our regular Utility business. Both of them are profitable and fairly similar in their profitability[21]

We have included in our workpapers to this rebuttal verified statement additional statements made by the Railroads regarding movement and commodity specific profitability.

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[19] 4Q 2010 Norfolk Southern Corporation's Earnings Conference Call. http://seekingalpha.com/article/248632-norfolk-southern-s-ceo-discusses-q4-2010-results-earnings-call-transcript?part=single

[20] 2Q 2012 Norfolk Southern Corporation Earning Conference Call http //seekingalpha com/article/745541-norfolk-southern-management-discusses-Q2-2012-results-earnings-call-transcript

[21] 3Q 2011 CSX Corporation Earning Conference Call http.//seekingalpha com/article/300599-csx-s-ceo-discusses-q3-2011-results-earnings-call-transcript

We must assume that these various railroad executives are not intentionally misleading their customers, stockholders and the investment community about their ability to calculate profits at a movement specific level, but rather they can and do measure profitability at levels well below the company-wide basis alleged by Mr. Baranowski [22]

Second, it was the STB that developed the concept of calculating ATC for individual movements, and by implication, individual movement profits. We refer to revenue above variable costs as contribution, and variable plus average fixed costs as ATC Our definitions of variable cost, fixed cost, total cost, revenue, and contribution are therefore consistent with the definitions the STB has used to frame the issue from its first discussions of the ATC methodology in *Major Issues*. If revenue exceeds variable costs, there is contribution. If revenue exceeds average variable costs plus average fixed costs, there must be an average profit on the movement It is illogical and disingenuous to argue that one can calculate the average variable costs, average fixed costs and ATC for a movement, but not the profitability for that movement Once the decision is made to allocate unattributable fixed costs to specific movements when determining ATC, one cannot unring the bell and say anything exceeding the movement's ATC is not allocated profit.

D. THE REVENUE DIVISION METHODOLOGY SHOULD CONTINUE TO BE BASED ON THE INCUMBENT'S RELATIVE COSTS

CSXT/NS state in their joint Reply Comments that·

[22] The further implication of Baranowski's assertions about profitability is that a railroad company cannot be considered profitable until it is revenue adequate, e.g, generates a return above all of its costs, including cost of capital, which is inconsistent with the railroads' statements about their companywide profitability.

> "A proper cost-based cross-over revenue allocation methodology would use the SARR's variable costs rather than the carrier's system average URCS costs."[23]

As we discussed in our OVS, the Board correctly decided in *Major Issues* to utilize the incumbent's variable costs, not the SARR's variable costs, in allocating the incumbent's cross-over traffic revenues. [24]

E. ALTERNATIVE REVENUE DIVISION APPROACHES EXIST

In response to the Board's invitation, our OVS included three alternatives to the Modified ATC and Alternative ATC revenue division methodologies. The first alternative was Corrected Modified ATC. In this model, the Modified ATC formula is applied, but the fixed cost component of total costs is adjusted to reflect the fact that fixed costs per route mile are not uniform across a railroad's system More specifically, Corrected Modified ATC fixed cost allocations are calibrated to reflect the higher relative fixed costs per route mile on high-density, multiple-track segments of rail This is done by basing the average fixed cost allocation on track-miles rather than route-miles for the on- and off-SARR segments.

We also discussed the use of a Three-Step ATC approach that would allocate revenues based on the ability of a movement to cover its variable and fixed costs Finally, we suggested that ATC is no longer required because the STB's own study indicated economies of density have been exhausted in the industry.

All of the revenue allocation methods we reviewed in our OVS, including the Modified ATC, Corrected Modified ATC, Three-Step ATC, meet the STB's twin principles for a fair and reasonable revenue allocation. First, they ensured the on- and off-SARR segments variable costs

[23] CSXT/NS Reply Comments, p. 21.
[24] See OVS, pp 42-44

of service are covered before allocating any contribution available on the whole movement Second, they reflect the economies of density inherent in the railroad industry by basing the revenue divisions in part on each segment's average fixed costs. [25] Moreover, we demonstrated in our OVS that the results of the proposed revenue allocations were reasonable and logical across all ranges of revenues, not just the limited range around where a movement's revenues are equal its variable costs In contrast, Original ATC produces unreasonable results on low rated movements and high rated movements, while Alternative ATC produces illogical results on some low rated and all high revenue movements. The Railroads attempt to refute these methodologies by claiming that our approaches are inconsistent with STB precedent and railroad costing practices. In actuality, it is the Railroads' arguments that are inconsistent and self-contradictory as explained below.

1. Corrected Modified ATC

The AAR, through Mr Baranowski, claims that our Corrected Modified ATC is incorrect because allocating fixed costs on a track-mile basis makes less sense than allocating fixed costs on a route-mile basis. However, he offers no quantitative analysis that supports his position. In fact, the argument he puts forth actually provides support for our proposal to allocate fixed costs based on track-miles.

Mr Baranowski states, "Costs that Messrs Crowley and Fapp would have the Board treat as fixed costs are not, in fact, fixed; but instead they are variable with density" and that "system average fixed costs (i e , costs that do not vary with volume) are the same for high and low density lines, by definition."[26] It appears that Mr Baranowski has misinterpreted both URCS and the decisions he cites. Although total system fixed costs do not vary with overall volume

[25] The Variable Cost Allocation approach also meets this principle if the STB's expert consultants Christensen are correct and the Railroads have exhausted their economies of density.
[26] Baranowski Reply VS, p 2, citing *Major Issues* and *Xcel*.

changes, how the fixed costs are allocated across the system (which is arbitrary by definition) does not require that fixed costs must be assumed to be the same across all segments *on a per route mile basis*

Mr. Baranowski also claims that allocating fixed costs based on track miles overstates fixed costs on high density lines.[27] Mr. Baranowski provides no support for his declaration. In contrast, as we demonstrated in our OVS, a ten-lane super highway has greater fixed costs per mile than a one-lane country road, a high density rail segment in the Powder River Basin ("PRB") has higher fixed costs per mile than a low density line that may see two or three trains per day.[28]

The simple reason for this is high-density lines have on average greater fixed investment and fixed operating costs than the low density lines. By definition, fixed costs are costs that must be paid even if the firm decides to produce zero output.[29] A multi-track, fully signaled line segment will have greater fixed costs than a single line track in dark territory even if no traffic moves over either track. This is because even absent any output (e.g., traffic), the multi-track territory will incur higher costs due to required, non-density specific operating requirements (signal inspections, line inspections, etc.) and opportunity costs on in-place investment.[30] These are costs that are incurred by the railroad even if one piece of traffic does not move over a line. At the same time, these costs are not uniform across a railroad, but rather differ with the amount of investment used along each segment.

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[27] Baranowski Reply VS, p. 2.

[28] See OVS at pages 33 and 34.

[29] See Varian, H. R., "Intermediate Microeconomics: A Modern Approach," Eighth Edition, W. W. Norton & Company, 2010, p. 350.

[30] Some may argue that this point is only true in the short-run, but not the long-run. But in the long-run, all costs are variable, so the distinction between short and long-run costs is moot.

To further support his claim, Mr Baranowski also makes several observations, none of which makes his case First, he states that, "although Crowley/Fapp focus only on track miles and track related facilities, URCS fixed costs include a variety of other costs that bear no relation to the densities or track miles over individual segments."[31] Rather than refuting our point, Mr. Baranowski is actually conceding that URCS fixed costs do include a variety of costs that bear a relation to the densities or track miles over individual segments (even if others do not, as he claims). As support for his position, Mr. Baranowski includes at Table 1 a statement that "only" 43 to 45% (nearly half) of fixed costs are related to running track ownership and maintenance." In other words, he concedes nearly half of these costs are related to track-miles and not route miles Even if we accept his assertion that slightly more than half (55 to 57%) of URCS fixed costs are unrelated to track-miles, his concession that the other half are related to track-miles utterly contradicts his prior statement that "system average fixed costs are the same for high and low density lines, by definition."

However, based on a cursory review of Mr. Baranowski's table, several things become clear Specifically, several of the "other" fixed cost components are obviously related to track miles as well. The fixed costs for "road operations" is the next largest category (20 to 21%). It is logical that fixed costs for road operations are greater on segments with more than one (1) track than a single line track – more tracks equals more trains[32] equals more road operations costs.

Like road operations, the investment and maintenance for yard operations (5%) will be greater for yards near rail lines with multiple tracks than single line tracks In other words, rail lines with multiple tracks lead to larger yards (with more tracks) than rail lines with single

[31] Baranowski Reply VS, pp 2-3
[32] Railroads only add track to segments where the density warrants it

tracks. Therefore, segments with a higher number of tracks correlate to yards with higher number of tracks More tracks means more fixed costs, which, in turn, means that the fixed costs are more closely related to track miles than route-miles.

Similarly, switching track ownership and maintenance costs (10 to 17%) are greater for segments with more switching tracks, which are likely to be high-density, multiple-track segments Thus, between 78 to 88 percent of fixed costs are directly or indirectly correlated to track-miles. Mr Baranowski's table also does nothing to support his position that fixed costs are more closely related to *route miles than to track miles*

Next, Mr Baranowski claims that, "because of economies related to individual components of railroad track infrastructure, railroad road property investment is not linear with the number of tracks."[33] While perhaps not linear, Mr Baranowski effectively concedes that railroad road property investment differs with the number of tracks (even if it is *not linear*), and certainly more reflective than investment per route mile as currently assumed Mr Baranowski's position is based on his description of right-of-way, roadbed, culverts, bridges and communication systems.[31] Specifically, he claims that, "[b]ecause multiple running tracks often share the same roadbed and infrastructure, the cost of constructing a double track main line are less than twice those of single track."[35] The implication to this statement is, despite the fact that multiple running tracks often share the same roadbed and infrastructure, the cost of constructing a double track main line are necessarily greater than those of single track. In contrast, the STB's current approach incorrectly assumes there is no change in costs with changes in track structure, which is clearly incorrect.

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[33] Baranowski Reply VS, pp 2-3.
[34] Baranowski Reply VS, pp. 4-5.
[35] Baranowski Reply VS, p 4

Excluding communication systems, all of the items Mr Baranowski discussed have increased costs with increased tracks While the cost increases might not be directly "linear," the costs do increase in contrast to the current assumption that they do not change at all. An allocation of the changes in the fixed costs for those items will more closely track changes in track-miles than route-miles, by definition. The real issue is that fixed costs, under URCS, will increase with increases in tracks per mile, not that the cost increase has to be linear with the increase in tracks. What Mr Baranowski appears to be claiming is that the linear variability in URCS is incorrect for road property investment and maintenance. However, the issue was argued in Ex Parte 431[36] and the ICC determined that linear variability was appropriate

2. Three-Step ATC

The second alternative we proposed was Three-Step ATC. In the first step of this model, movement revenues up to URCS variable costs are allocated based on the ratio of on-SARR to total movement variable costs. In the second step, revenues in excess of variable cost (if any) up to average fixed costs are allocated based on the ratio of on-SARR to total movement fixed costs. Therefore, revenues up to total costs are allocated based on total costs in the first two steps In the third step, after total costs have been fully recovered and allocated based on the ratio of on-SARR to total movement total costs, revenues in excess of total cost (if any) are allocated based on the ratio of on-SARR to total variable costs

The Railroads objected to Three-Step ATC as a viable revenue division model based on arguments presented by Mr. Baranowski who stated that:

> "Three Step ATC is essentially a variation of Corrected Modified ATC that further suppresses the effects of density in the crossover revenue allocation process as contribution above variable

[16] Ex Parte No. 431 (Sub-No 1), Adoption of the Uniform Railroad Costing System as a General Purpose Costing System for all Regulatory Costing Purposes (5 I.C C 2d, 894).

> cost increases and reduces the amount of crossover revenue allocated to the lower density line segments."[37]

Mr. Baranowski states that the Three Step formula does not give adequate "weight" to the densities of the on- and off-SARR portions of cross-over movements in the revenue allocation process, and that the methodology "turns the Board's Original ATC revenue allocation formula on its head by allocating more revenue based on variable cost, which does not include a density component."[38]

Mr. Baranowski's long critique boils down to two points First, he asserts Three Step ATC places too much weight on variable costs and not enough on density related fixed costs, and second, it starves the residual incumbent by not recovering fixed costs. Mr. Baranowski's critique is incorrect.

Three-Step ATC does not place too much weight on variable costs because it clearly allocates revenues based on both variable and fixed costs. It first makes the economically logical decision to recover a segment's variable cost before making any contribution to fixed costs and profits. Once, variable costs have been recovered, it then allocates revenues up to each segment's fixed costs based on the relative fixed cost of each segment There is nothing illogical about these allocations since they are based on logical and economically justified metrics.[39] Implicit in Mr. Baranowski's argument is that low-density segments should recover their fixed costs prior to high density segments. There is no logical reason for such an allocation method.

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[37] Baranowski Reply VS, pp 5-6.
[38] Baranowski Reply VS, p 6.
[39] Additionally, Mr Baranowski's' claim that URCS does not take into consideration density is not accurate URCS variable costs reflect density in any cost component that determines variability based on regressions that utilize track miles as a component in the regression, which measures the variability based on the relationship of the track miles to the appropriate service unit

Mr. Baranowski is also critical of Three-Step ATC because he believes it inappropriately allocates revenue in excess of total costs (i e , revenue left over after the incumbent's total variable plus fixed costs have been covered) without regard for the relative fixed costs of the movement segments. As discussed above, Mr Baranowski either fundamentally misunderstood our definition of profit or he intentionally misconstrued it in an attempt to make his point

Mr. Baranowski also believes the Three-Step ATC approach will starve the residual incumbent of revenues sufficient to cover its fixed costs.

> "A revenue allocation that does not capture properly the economies of density will leave the [presumed low-density] residual incumbent in SAC cases without adequate revenues to cover its fixed costs -- and therefore to sustain the network that feeds crossover traffic that the [presumably high-density] SARR depends on."[40]

Such a position is contradictory to the basis of the Three-Step process. which ensures fixed costs for both segments are recovered before any excess revenues above ATC is allocated. In other words, if revenues exceed ATC for the entire movement, in ensures that both the on- and off-SARR portions of the movement recover their variable and fixed costs. Once again, Mr. Baranowski falls back to the position that a low-density line should recover its fixed costs before a high-density line recovers its fixed costs.

3. <u>Variable Cost Allocation</u>

The third alternative was Variable Cost Allocation. As the name implies, this model allocates all revenues based on the ratio of on-SARR to total movement variable costs. The Railroads characterized this model as a "collateral attack on ATC."[41] Far from being a collateral attack, the proffered Variable Cost Allocation approach simply acknowledges that the STB's

[40] Baranowski Reply VS, p 11.
[41] Baranowski Reply VS, p. 11

own experts have pointed out that the Railroads have likely exhausted their economies of density, and eliminating the need for ATC divisions.[42]

As we indicated in our OVS, the STB stated in *Major Issues* that a revenue allocation methodology that relies primarily on variable costs to allocate revenue fails to take into account the economies of density that characterize the railroad industry. This is not the case however, when a railroad has exhausted its economies of density. In the situation where economies of density have been exhausted, a variable cost based approach would provide revenue allocations that are functionally equivalent to those based on ATC. [43] Laurits R. Christensen Associates, Inc. ("Christensen"), in a study commissioned and adopted by the STB to study competition within the railroad industry, concluded that the large individual Class I railroads have effectively exhausted their economies of density.

Far from being a collateral attack, our OVS simply pointed out that the conditions the STB identified wherein a variable cost revenue allocation approach would effectively equal an ATC revenue allocation approach have been met based on the work of the STB's own experts. In other words, if the STB accepts the Christensen Report's conclusions, as it has appeared to, then it must accept that a variable cost allocation approach will on average equal an ATC approach.

The Railroads also claim that the Christensen Report's conclusions of economies of density are irrelevant to cross-over traffic revenue divisions since the Christensen Report only looked at system average figures and not individual movements, which are of interest in cross-over traffic divisions. In essence, the Railroads are discounting the results of the Christensen Report because they are system average figures. However, ATC division percentages depend

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[42] Contrary to the AAR's belligerent reference, the Christensen Report did not look at economies of density in the industry has a whole, but also looked at the economies of density for the largest U S based Class I railroads individually

[43] See OVS at page 38.

upon system average figures themselves, whether they be unadjusted Phase III URCS variable costs or system average fixed cost per mile. The Railroads are disingenuous by arguing that system average figures can be used in one instance when it helps their argument, but ignoring system average results in the form of the Christensen Report conclusions when it contradicts their desired results.

The AAR also argues that "[i]f there were no remaining economies of density, complainants would have no incentive to select a SARR route that departs from the incumbent's route to take advantage of economies of density."[44] The AAR is jumbling concepts. A SARR is a hypothetical construct that is designed in part to "take advantage of economies of density." How a SARR is constructed says nothing about whether economies of density have been exhausted on real world railroad lines.

Additionally, even if a line segment replicated by the SARR is at capacity and economies of density are exhausted does not mean there is not another line segment that is more advantageous If another available line segment can provide more revenue for the SARR due to a different mix of traffic, the alternative line segment should be chosen. A shipper in a SAC presentation is not only allowed, but in fact encouraged, to build the most profitable system available. As the STB explained in its WFA/Basin decision.

> WFA's choice to replace low-rated traffic with higher-rated traffic is both logical and permissible. Indeed, every choice made by a complainant in designing a SARR will be done with an eye to reducing the maximum lawful rate produced under the SAC test So long as the complainant does not violate any SAC rule or principle in the process, the defendant carrier cannot complain simply because the choice of the traffic group (which rests with the

[44] See AAR Reply Comments, p 12 (internal quotation marks and citation omitted)

> complainant) is aimed to show the challenged rate to be too high [45]

The AAR has incorrectly confused a cost issue (economies of density) with a revenue issue, which has led to its incorrect claim that there is no reason for rerouting traffic if economies of density have been exhausted

[45] See *WFA/Basin 2009*, at p. 7

III. CROSS-OVER RESTRICTIONS

The STB believes that there is a material disconnect between the revenue allocated to a SARR on single-car and multiple-car overhead cross-over movements and the costs incurred by the SARR to transport this traffic. The Board's proposed remedy is to limit the amount and type of cross-over traffic a shipper may include in its SAC presentation.

As we demonstrated in our OVS, no material disconnect actually exists, and the Board's proposal undermines the very foundation of a SAC test All of the Railroads, but for CSXT/NS, agree with the STB's proposition on the alleged misalignment between SARR revenues and SARR costs, and on the Board's proposal to restrict the cross-over traffic. As we explain below, the Railroads do not creditably support their position for a disconnect in SARR revenues and costs, or for restricting cross-over traffic

A. THERE IS NO DISCONNECT WITH CROSS-OVER TRAFFIC

In our OVS, we showed that the Board's concerns about a supposed "disconnect" between the amount of the incumbent's revenues that are allocated to the SARR and the cost of the SARR's operations are irrelevant from a SAC standpoint because revenue divisions are intended to allocate revenues to discrete segments of the incumbent's end-to-end movements based on the relative costs of the incumbent's operations over those segments and are not intended to allocate revenues based on the SARR's operations.

We also demonstrated in our OVS that even if the SARR's costs were relevant in the revenue allocation process, there is no real disconnect between the revenues allocated to the SARR and the residual incumbent and that any perceived disconnect is merely a recognition that the Board's URCS Phase III costing model develops individual movement costs based on unit costs that reflect the incumbent's system-average operations Finally, we demonstrated that if

any disconnects between URCS Phase III costs and costs actually incurred to move traffic actually do exist, they are just as likely to be present on the off-SARR segments as on the on-SARR segments.

Review of the Railroads' reply comments reveals that only UP and BNSF even addressed whether the perceived disconnect exists UP asserts the disconnect the Board is concerned about does not involve the "SARR's operating costs," but instead involves "the Board's concern . . . the [revenue] allocations are not accurately reflecting the costs of the services the incumbent is providing on portions of the route being replicated by the SARR and the costs of the services the incumbent is providing on the portions of its route that are not being replicated by the SARR."[46] However, UP does not provide any analysis of why the revenue allocations are not "accurate[]."[47]

BNSF contends that the inclusion of carload cross-over traffic together with the use of the incumbent's URCS variable costs in the ATC revenue division formula necessarily leads to distortions that result in over allocation of revenues to the SARR. BNSF opines that:

> "Complainants typically assume that the SARR will operate as a "hook-and-haul" railroad and therefore will not incur costs associated with gathering carload traffic for placement on trains, switching carload traffic in yards, train assembly and disassembly, and delivery of cars to their final destination, among others costs incurred by the incumbent railroad to provide carload service. While the SARR avoids these costs for carload traffic, ATC allocates revenues as if the SARR did incur these costs and MMM assigns responsibility for stand-alone costs among shippers on the SARR, including carload shippers, as if the SARR incurred these costs."[48]

BNSF observes that in circumstances where the SARR (or the residual incumbent) operates trains in "hook-and-haul" overhead service, it does not incur costs associated with gathering carload traffic for placement on trains, train assembly and disassembly, and delivery of

[46] UP Reply Comments, p 6
[47] *Id*
[48] BNSF Reply Comments, p 16

cars to their final destination (i.e., origin and termination switching activities) BNSF's statement that ATC allocates revenues as if the SARR incurred these costs is flatly incorrect. ATC allocates revenues based on URCS costs. URCS allocates origin and destination terminal costs to the carrier that performs the terminal switching operations. As shown in our OVS Exhibit No 3, the terminal switching costs assigned to carload traffic are more than four-and-a-half times greater than the terminal switching costs assigned to unit train traffic.[49]

BNSF's observation that costs associated with switching carload traffic in yards may be allocated to rail segments where no such switching occurs is in certain instances correct. As we discussed in detail in our OVS, URCS allocates I&I switching costs on a per-mile basis. As a result, some segments are over-allocated I&I costs and other segments are under-allocated I&I costs. However, as we clearly demonstrated in our OVS Exhibit No. 3 and Table 4, the impact of those costs on the variable cost allocation among segments is minimal

BNSF also asserts that the alleged distortion on so-called "hook and haul" traffic results from the fact "that the incumbent's costs for the portion of the through movement replicated by the SARR will necessarily be overstated when average costs associated with the through movement are used" because "the Board does not permit adjustments to URCS costs to reflect the incumbent's costs only for the portion of the movement replicated by the SARR."[50] In other words, BNSF believes that an inability to adjust URCS costs on only a portion of the movement creates a disconnect In actuality, BNSF's position is an attack on the STB's decision to use system average Phase III variable costs in the calculations. The Board determined it is appropriate to use the incumbent's system average costs for the on- and off-SARR portions of the movement, so the attack here is on the Board's choice to use system

[49] 83/18=4.61 and 97/21= 4 62
[50] BNSF Reply Comments, p. 17.

average costs rather than movement specific costs. If there is a mismatch between revenues and costs, the answer is not to remove the traffic from the SARR, but to make adjustments to the URCS variable costs to account for any differences.

Finally, BNSF is the only railroad that attempts to respond to our opening demonstration regarding the limited effect of removing I&I costs from consideration in calculating cross-over traffic divisions.[51] See OVS at 48-51 and Exhibit 3. In particular, BNSF suggests that our demonstration that excluding I&I switching costs has little impact "is beside the point because the costs associated with carload traffic that are avoided by the SARR are not limited to URCS system-average switching costs."[52] BNSF adds that "[t]he SARR is handling the traffic as if it were trainload traffic, with all of the efficiencies associated with trainload traffic, but the URCS variable costs used in the revenue allocation are calculated as if the SARR were transporting carload traffic."[53]

BNSF's argument is unavailing. Any perceived disconnect cannot relate to differences between how the SARR and the incumbent operate since their operations are essentially the same. Where the incumbent provides overhead service, the SARR provides overhead service on the selected traffic as well. Moreover, one of the largest efficiency factors that drives the difference between costs for trainload and non-trainload traffic is interchange costs [54] But, under the STB's ATC approach, interchange costs between the incumbent and the SARR are removed from the ATC calculation so any interchange-related efficiencies are eliminated. The remaining primary difference between trainload and non-trainload costs comes back to I&I related switching costs, which we showed in our OVS has no real impact.

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[51] See OVS, pp 48-51 and Exhibit 3.
[52] See BNSF Reply Comments, p. 18.
[53] *Id*
[54] The STB's Phase III URCS model assumes unit train movements incur 50 percent of the switch engine minutes per interchange switch that single- and multiple-car shipments incur.

B. REVENUE DIVISION METHODOLOGIES CAN ADDRESS ANY PERCEIVED DISCONNECTS

As we discussed in our OVS, if the Board perceives a problem with the way its revenue allocation methodology allocates revenues to incumbent segments, it should address the perceived methodological shortcomings rather than avoiding the problem through the implementation of broad cross-over traffic restrictions in an effort to render the issue moot

1. The Board's Proposed "Solution" Is Disproportionate To The "Problem" It Perceives

Based on the supposed distortions that it perceives are caused by the use of system-average URCS variable costs to allocate revenues to the SARR and residual incumbent, BNSF concludes that, "Eliminating cross-over traffic in Full-SAC cases is also the simplest and most straight-forward way of dealing with the particular distortions created by the use of carload traffic as cross-over traffic."[55] Similarly, UP asserts that, "the Board should prohibit the use of cross-over traffic entirely because any method of allocating cross-over revenue is necessarily arbitrary."[56] The Railroads' proposed self-serving solutions may be clean and easy to implement, but they are an overreaction to a relatively minor "problem" and are wildly disproportionate to any small disconnect they are intended to avoid.

2. Problems With URCS Costs Should Not Limit Cross-Over Traffic

The Board concluded in *Major Issues* that results based on system-average URCS costs, while imperfect, were not discernibly less reliable than results based on movement-specific adjustment to URCS costs in calculating total movement variable costs. The STB further

[55] BNSF Reply Comments, p 14
[56] UP Reply Comments, p. 6

concluded that the costs and time associated with the complex movement-specific adjustments served to unnecessarily complicate the analysis without producing materially different results.[57] Finally, the STB concluded that:

> "And in proposing to include additional inputs in URCS Phase III, or more generally, that we reexamine the entire URCS system, the carriers request a change to the URCS program. That should only be considered in a separate rulemaking proceeding, where the specific proposal(s) would be subjected to public comment and, if adopted, uniform application."[58]

The Board's sentiments and statements in its *Major Issues* decision are no less valid today than they were then If the Board or the parties believe the URCS program inadequately reflects the costs for certain movements or movement segments, the solution to the problem is clear: the URCS program should be updated and adjusted to determine costs more accurately.

The Board's proposal to eschew the pursuit of the clear and obvious solution to its perceived problem (adjusting the URCS formula) in favor of taking actions designed to avoid the problem (limiting SARR access to cross-over traffic) is troubling. Furthermore, the proposed cross-over traffic restrictions would introduce far more uncertainty and imprecision than they would solve. UP claims that.

> "The Board remains free to prohibit the use of cross-over traffic when it lacks confidence that the benefits from that device outweigh the costs of uncertainty and imprecision. By restricting the use of cross-over traffic, the Board can be confident that it will obtain more accurate, reliable results than if it tried to address its concerns through a less direct, more expensive effort to modify URCS."[59]

UP's self-serving statements are clearly intended to obfuscate the issue in hopes that the Board cannot see the forest for the trees. UP's statement improperly couches the issue of obtaining accurate, reliable results in the narrow context of revenue divisions on cross-over

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[57] See *Major Issues*, pp. 51-58.
[58] *Major Issues*, p 59
[59] UP Reply Comments, p. 7

traffic. The Board's objective should be to achieve accurate, reliable results *at the end of the SAC analysis*. The revenue division formula produces results that feed a key part of the overall development of revenues and costs that ultimately determine the reasonable rate level applicable to the issue movement, but revenue divisions alone do not make a SAC case.

There are many individual revenue and cost components that are calculated independently and that feed into the larger SAC model. Any one of them could be scrutinized to the point where some input on some level could be called into question If the Board were to simply discard any cost or revenue input that could potentially be construed as less than absolutely precise, there would simply be no components left in the SAC analysis framework. As we discussed in our OVS, all models inherently incorporate some level of imprecision. If the Board cannot accept some level of imprecision in its modeling exercise, the exercise is doomed from the start.

If one option is to include cross-over traffic whose revenue divisions may not be absolutely precise in every instance, and the other option is to exclude the cross-over traffic entirely, it is clear that retaining the traffic, even with imperfect revenue divisions, will produce far more accurate, reliable *SAC results* than eliminating the traffic.

C. A SAC TEST BASED ON RESTRICTED ACCESS TO CROSS-OVER TRAFFIC IS MEANINGLESS

The Railroads and Mr. Baranowski assert that limiting the use of cross-over traffic in SAC presentations is consistent with the theory of contestable markets and CMP because cross-over traffic is just a simplifying device. Therefore, its limitation does not create a barrier to entry upon the SARR. In actuality, the Railroads' and Mr. Baranowski's positions are inconsistent with the very theory of contestable markets and prior Board precedent. As we explained in great

detail on our OVS, the concept of barriers to entry is not so limited as to include only costs incurred by the SARR but not by the incumbent. A barrier to entry can also manifest in not allowing the SARR to use the same production techniques available to the incumbent Moreover, the STB has previously articulated this point by declaring in *Coal Rate Guidelines* that the SAC constraint would be useless if a shipper could not employ the same production techniques used by the incumbent in grouping traffic to maximize economies of density. Finally, Mr. Baranowski incorrectly states that certain prior cases did not utilize cross-over traffic so it is acceptable for current SAC cases to not use cross-over traffic. We discuss these issues below

1. **Railroads' Assertions That Restrictions On Cross-Over Traffic Are Consistent With Contestable Market Theory Are Incorrect**

At pages 53 to 56 of our OVS, we thoroughly explained the underpinnings of CMP, and its foundation in the theory of contestable markets. We also discussed in detail the concept that contestable markets are defined by the accessibility to the market by new entrants, and that the new entrants, without restriction, can serve the same markets and use the same productive techniques as employed by the incumbent firms. We also demonstrated that restricting cross-over traffic is inconsistent with the definition and concept of contestable markets since it would restrict access to the same production techniques available to the market incumbent.

The Railroads and Mr. Baranowski disagree with our clear factual conclusions, and instead state that restricting cross-over traffic is not a barrier to entry, and therefore not inconsistent with contestable market theory. They base their assertion on a statement made in *Major Issues* in which the STB provided a partial definition of the barriers to entry, but ignored other cases where the Board, or its predecessor ICC, provided a full definition of entry barriers.

The Railroads and Mr. Baranowski point to the statement made by the STB in *Major Issues* that one portion of the definition of a barrier to entry is a cost that a new entrant incurs that was not incurred by the incumbent railroad. However, as our OVS clearly demonstrated, the originators of contestable market theory were not so limited in their definition of barriers. As explained by Professors Baumol, Panzar and Willig, an entry barrier can be manifested as a cost or as restriction to a production technique.

> "We define a perfectly contestable market as one that is accessible to potential entrants and has the following two properties: First, the potential entrants can, without restriction, serve the same market demands and use the same productive techniques as those available to the incumbent firms. Thus, there are no entry barriers in the sense of the term used by Stigler."[60]

Our interpretation of entry barriers as defined by Professors Baumol, Panzar and Willig is not unique. We demonstrated in our OVS that other economists also interpret barriers to entry to include limiting access to the production techniques used by the incumbent that would lead to efficiency disadvantages available to the SARR.

> "Very importantly for the theory of contestable markets, potential entrants are able to impose this strong discipline on the incumbent only if they are able to compete on equal terms with no cost or efficiency disadvantages that would impose barriers to entry."[61]

The concept of entry barriers encompassing other aspects of SARR operations and design beyond strictly incurred costs was also adopted by the ICC in developing the SAC test in *Coal Rate Guidelines*. The ICC recognized that barriers to entry could take forms other than

[60] See OVS, p 54.
[61] See OVS, p 55 quoting Dr. Tye on the definitions of barriers to entry

simply costs. They could also take the form of any other limitation that would place the stand-alone entry in a subordinate position relative to the incumbent carrier:

> "The costs and other limitations associated with these entry and exit barriers must be omitted from the SAC analysis in order to approximate the cost structure of a contestable market "[62]

The ICC clearly understood that barriers to entry could manifest themselves in forms other than costs and could take the forms of production techniques used by the incumbent. As explained by the ICC in discussing why it would be inconsistent to limit a SARR's ability to group traffic:

> "The ability to group traffic of different shippers is essential to theory of contestability...Without [traffic] grouping, SAC would not be a very useful test, since the captive shipper would be deprived of the benefits of any inherent production economies."[63]

The quote above demonstrates that the ICC recognized that not allowing a stand-alone entrant to use the same production techniques available to the incumbent carrier would effectively create a barrier to the entrant, and, more importantly, make the SAC test useless. It is painfully obvious that the concept of a barrier to entry is not restricted to costs incurred by the SARR and not the incumbent, but rather extends to placing the SARR in a disadvantageous position relative to the incumbent

2. The Proposed Cross-Over Traffic Restrictions Serve As A Barrier To Entry

The Railroads also contend that the proposed cross-over traffic limitations do not impact a shipper's ability to group traffic because the shipper is free to build the facilities to carry the non-issue traffic from origin to destination Such additional construction is not an entry barrier

[62] See *Coal Rate Guidelines*, p. 529
[63] See *Coal Rate Guidelines*, p 544

according to the Railroads because the incumbent carrier has incurred this end-to-end cost itself. This argument is incorrect because the incumbent carrier does not have to incur the cost if it so chooses. Rather it can have other railroads perform the origin/destination delivery function as has been the railroad industry practice in the recent past.

Over the last 20 years, the Class I railroads have reduced the size of their networks by abandoning, leasing or selling lines to non-Class I carriers, while simultaneously carrying more and more traffic As explained by the AAR in its 2011 Railroad Facts:

> "Class I mileage has been declining for many years, although the consolidation of regional railroads into Class I railroads caused increases in 2002 and 2010. While some line segments have been abandoned, many former Class I miles have been sold or leased to non-Class I railroads, including industrial and passenger railroads. Despite the decrease in total miles of road and track, second main track has increased by over 1,000 miles over the decade, as railroads have added capacity where it is needed." [64]

Instead of originating/terminating every piece of traffic that they carry, the Class I railroads have made themselves more productive by spinning-off low density lines to non-Class I railroads, who then perform the origination/termination function. The Railroads then focus on the high-density portions of the movement, where they can effectively capture the economies of density inherent in railroad operations by selectively grouping traffic. In other words, the Railroads themselves rely on other carriers to originate and/or terminate movements they do not wish to originate and/or terminate themselves. Requiring a SARR to build from an origin to a destination simply to allow it to include a movement in its traffic group would create a barrier not incurred by the existing Railroads, and thereby be plainly inconsistent with the underpinnings of contestable markets and SAC

[64] See Railroad Facts, 2011 Edition, p. 45.

Mr Baranowski also makes the claim that the SAC test is premised on the idea that the SARR serves as a full replacement for the incumbent on the traffic the SARR serves, and therefore, cross-over traffic, which is a simplifying device, is not part of CMP. Mr. Baranowski's position is incorrect. We stated in our OVS that CMP, as developed by the ICC, rests on the theory of contestable markets.[65] The implication of Mr Baranowski's allegation is that contestable market theory requires the new entrant to replace the incumbent, *in toto*, but this position is not consistent with the theory of contestable markets. In a contestable market, the incumbent can be restrained by the threat of entry by a firm marketing a subset of the incumbent's products or services, and not necessarily all of the incumbent's services As explained by Professors Baumol, Panzar and Willing:

> "Thus, a marketing plan of a potential entrant consists of a (sub)set of the relevant products $S \subset N$ which, including the costs of entry, can be marketed by entrant at prices no higher than those of the incumbent. The entrant can offer to sell *any* quantities of its product no greater than the amounts demanded at the prevailing prices constituted by the effective price vector."[66]

The implication of this proposition is that an incumbent's rates can be restrained by the threat of another company entering the market providing only a subset of the services provided by the incumbent. In other words, the entrant, in this case a SARR, need not provide homogenous service as the incumbent to restrain the incumbent's prices.[67] The SARR can provide a subset of such service, and be perfectly in-line with contestable market theory In fact, not allowing the

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[65] The other defining characteristics of CMP is differential pricing, which is not an issue in SARR traffic selection

[66] See Baumol, Panzar and Willing, p. 193 (emphasis in original) The term "N" is the relevant set of products being offered and "S" is any subset of N.

[67] See Baumol, William J , "Contestable Markets An Uprising in the Theory of Industry Structure," *The American Economic Review*, March 1982, pp. 1 -15, "[Contestable market] firms need not be small or numerous or independent in their decision making or produce homogenous products "

potential entrant to serve a subset of the incumbent's market is inconsistent with contestable markets, and by extension CMP and SAC

3. All But One Prior SAC Case Utilized Cross-Over Traffic

Mr. Baranowski implies that a shipper should have little difficulty developing a SARR without cross-over traffic since shippers in prior SAC cases have been able to do so [68] He cites as support for his implication the STB's decisions in *WTU, McCarty Farms* and *APS*[69] as evidence shippers can construct SARR's without utilizing cross-over traffic. In actuality Mr. Baranowski is incorrect on two of the three cases cited. A simple reading of the decisions shows that both *WTU* and *McCarty* employed cross-over traffic in their respective traffic groups. In the third case he cites, *APS*, he is correct that it did not use cross-over traffic, however that was a unique situation that is not representative of most SAC cases

The SARR construction in *WTU* ran from the PRB of Wyoming to WTU's generating station at Oklaunion, Texas, and had seven (7) interchanges along the route. [70] Three (3) of the *WTU* SARR interchanges were with non-affiliated BN railroads: the Denver and Rio Grande Western Railroad at Pueblo, CO, The Southern Pacific Transportation Company at Fort Worth, TX, and the UP at Northport, NE. However, the *WTU* SARR interchanged with the then recently merged BN and Atchison, Topeka and Santa Fe Railroad Company ("ATSF") at four locations: Pueblo, CO, Denver, CO, Amarillo, TX and Fort Worth, TX In deciding the case, the STB was

[68] Baranowski Reply VS, p. 14.
[69] Docket No 41191, *West Texas Utilities Company v. Burlington Northern Railroad Company*, 1 STB 638 ("*WTU*"), STB Docket No 37809, *McCarty Farms, Inc et al v Burlington Northern, Inc* , 2 STB 460 ("*McCarty Farms*"), and STB Docket No. 41185, *Arizona Public Service Company and PacifiCorp v The Atchison, Topeka and Santa Fe Railway Company*, 2 STB 367 ("*APS*")
[70] See *WTU*, p 658

well aware that these movements involved cross-over traffic since it specifically noted what had once had been interline movements were now single-line movements:

> "As noted above, BN and the Santa Fe have now merged, making single-line movements out of what was previously joint-line BN-Santa Fe Movements."[71]

In noting that what once had been joint line movements were now single line movements, the STB effectively acknowledged that the SARR was interchanging traffic with the residual incumbent This is by definition cross-over traffic. If the STB had not intended for this traffic to be handled as cross-over traffic, it would have requested the parties to submit additional evidence regarding the costs to build to the movement's final destinations The STB did not do this, though, and instead accepted that this cross-over traffic would be terminated by the merged incumbent carrier

In *McCarty Farms*, the STB could not have been any clearer that cross-over traffic was used in the case since it directly said so in its decision In discussing how to divide revenues between the SARR and the residual incumbent, the STB stated:

> "The parties agree on the volume of traffic that would have moved on the FRR from 1981 through 1993, and on the revenues during that period for traffic that would have been local to the FRR or interchanged with railroads other than BN. However, the parties disagree over how to estimate what the FRR's share would have been of the revenues from crossover traffic moved over BN's feeder lines and interchanged with the FRR under the McCarty's stranded-line hypothesis."
>
> ***
>
> "BN proposed several alternative means of distributing the revenues from the crossover traffic.

[71] See *WTU*, p. 658

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> We find that the modified mileage proration method is superior to a straight mileage proration, because it takes into consideration differing handling costs. Accordingly, we use BN's modified mileage proration method for computing FRR's share of revenues from crossover traffic in 1981 through 1993."[72]

It is completely nonsensical to assert that the *McCarty Farm*'s SARR did not use cross-over traffic as part of the SAC presentation when the STB cited to the specific handling of cross-over traffic.

The one instance in which Mr Baranowski and the Railroads were correct was the *APS* case, which hypothesized a SARR to carry traffic from the McKinley Mine in New Mexico, to two generating stations, APS' Cholla Generating Station at Joseph City, AZ and Salt River Project's Coronado Generating Station, at Coronado, AZ.[73] The SARR in the *APS* case constructed only 115.4 miles of rail, the shortest SARR presented in a SAC case.[74] The very short *APS* issue movement is not representative of most high-volume coal movements.

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[72] See *McCarty Farms*, pp. 471-472.

[73] See *APS*, p 381.

[74] As a basis of comparison, the SARR presented in the recent *WFA/Basin* case, which many have acknowledged is an extremely short SARR, was nearly two and half times as long as the *APS* SARR

4. An Ability To Develop Large SARRs Does Not Eliminate The Need For Cross-Over Traffic

The Railroads argue that restricting cross-over traffic would not limit the ability of a shipper to develop a SAC case because a single shipper, *DuPont*[75], has developed a SAC presentation with a SARR of over 8,000 miles in length. According to the Railroads' logic, because a single shipper has constructed a lengthy SARR, other shippers can likewise construct large SARRs that would provide origin to destination service for all of the SARR's traffic, and removing the need for cross-over traffic.

At least one fatal flaw in the Railroads' argument is that while the DuPont SARR is relatively lengthy compared to other SARRs used in STB cases[76], it is significantly smaller than what it likely would have been if DuPont had not included cross-over traffic in developing its SAC presentation

Based on publicly available information presented in *DuPont's* Opening evidence, the *DuPont* SARR, the DRR, is expected to carry 6 2 million revenue carloads and intermodal units in 2010.[77] This reflects approximately 91.6 percent of NS' 6 8 million revenue carloads/units carried in 2010.[78] While carrying nearly all of NS's traffic at some point along the SARR, the DRR only operates 8,091 81 route miles.[79] The miles operated by the DRR only reflect 36 percent of the NS' 20,183 route miles operated in 2010. In simple terms, the DRR carries nearly all of NS' 2010 traffic, but does it using only one-third of the route miles. This is because, like

[75] Docket No NOR 42125, *E. I. DuPont de Nemours & Company v Norfolk Southern Railway Company* ("*DuPont*").
[76] *DuPont* involves a complaint alleging that rates on traffic moving between 138 origin/destination pairs is unreasonable. By contrast, most coal rate cases to date have involved challenges to rates applicable to only one, or only a few, origin/destination pairs
[77] See Opening Evidence of E I DuPont de Nemours & Company (Public Edition), p. III-A-4
[78] See NS 2011 SEC Form 10-K, p. K21.
[79] See Opening Evidence of E I DuPont de Nemours & Company (Public Edition), p III-B-2

shippers in all other SAC cases, *DuPont* relies on cross-over traffic to simplify the SAC presentation If *DuPont* could not use cross-over traffic in its SARR presentation, it would need to reproduce virtually all of the NS's network. Assuming the DRR's route miles grew in proportion to the volumes carried would mean the DRR would need to increase its route miles to over 18,000 miles [80]

The absurdity of the Railroads' argument can also be seen by looking at the SARR developed and used in the *Xcel* case. The STB stated in its *Xcel* that the 396 mile SARR was designed to carry traffic to just 37 shippers, and that if the shipper was forced to build the SARR to the delivery point of each shipper, the SARR would be nearly 4,000 miles long.[81] Such an expanded SARR would be the third largest SARR every constructed, after *DuPont's* 8,092 miles and *McCarty's* 4,469 miles, just for carrying traffic to a handful of shippers. In simple terms, the shipper would need to develop one of the largest SARR's every conceived to challenge a rate on a movement that is less than 400 miles in length. Just because a SARR of such length could conceivably be constructed does not mean it would be sound regulatory policy to do so.

[80] 20,183 total NS operating miles x 91.6 percent of NS's traffic carried
[81] See *Xcel*, p. 601.

IV. CONCLUSIONS

The Railroads' Reply Comments make a great deal of noise about the "fairness" of revenue allocations on cross-over traffic , and the "biases" cross-over traffic introduces to SAC presentations. In their view, the only fair revenue allocation approach provides off-SARR, low density line segments more revenues and the only unbiased use of cross-over traffic is its complete elimination from use in SAC cases. The Railroads' claims must be summarily rejected

In contrast, we have presented alternative revenue division allocation methodologies that not only meet the principles outlined by the STB, but also eliminate the biases inherent in the railroad's recommended revenue allocation approaches. The STB has indicated that any revenue allocation approach should address two competing principles. First, the revenue allocation approach should not create the implausible result of driving revenues below a movement's variable cost of service. Second, the revenue allocation approach should take into consideration the role of economies of density inherent to the railroad industry. Original ATC fails the first of these principles, and therefore should not be used under any circumstances.

The revenue allocation approaches we presented in this proceeding, including Modified ATC, Corrected Modified ATC, Three-Step ATC, definitively meet these two principles as they ensure each segment's revenues cover a movement's variable costs before making contributions to fixed costs and profits, while also incorporating the returns on density inherent in the railroad industry The straight variable cost allocation approach also meets these principles if the STB's own consultants are correct and the Railroads have exhausted the economies of density inherent in their networks Moreover, unlike the Alternative ATC approach suggested by the STB and endorsed by the Railroads, the approaches we reviewed do not insert biases against high-density segments and/or high revenue movements.

We have also demonstrated that the Railroads' Reply comments exaggerated what they claim are failings of the Corrected Modified ATC approach and the Three-Step ATC approach. The Railroads' claimed that the Corrected Modified ATC approach over-allocated revenues to the high-density segments on a railroad by allocating fixed costs on a per track-mile basis rather than a route-mile basis However, as we discussed above, the Railroads' arguments were either counter to basic economics (e g., the railroads incur higher fixed costs on multi-track lines than on single-track lines when there is no output), or their arguments actually supported our position that fixed costs change with changes in track miles. In addition, contrary to the Railroads' claims regarding an inability to calculate movement specific profits and allocate these profits as part of a Three-Step ATC, we showed that the Railroads themselves calculate profits on movements or groups of movements, and that one cannot assign an ATC to a movement and not also calculate a profit for that movement where revenues exceed ATC.

The Railroads were not content to only argue for the use of discredited and biased revenue allocation approaches, but also claimed that restricting cross-over traffic in SAC presentations was not inconsistent with CMP and the theory of contestable markets and that the Board's proposed restrictions correctly addressed an alleged disconnect between SARR costs and revenue allocations. Neither position is correct Contestable market theory holds that barriers to entry can manifest as either costs or as limitations on access to production techniques. This position is not only held by economists, but also held by the ICC when developing the SAC test. Restricting the use of cross-over traffic would limit the ability of stand-alone entrants to group traffic in the same manner as the Railroads, and thereby deprive the SARR access to the same production techniques used by the incumbent railroads

Additionally, the proposal to restrict the use of cross-over traffic is really placing the cart before the horse since we demonstrated that the alleged disconnect between a SARR's revenue allocation and costs is at best *de minimus*, and most likely not even present If the STB ultimately believes there is a disconnect, the answer is not to make wholesale restrictions to cross-over traffic, but to instead make minor adjustments to the URCS Phase III variable costs to address the perceived disconnects.

Finally, the idea held by the Railroads that a shipper can make a SAC presentation under the current SAC procedures without using cross-over traffic is misplaced. Contrary to the Railroads' assertions, all modern SAC cases decided by the STB, but for one, have used cross-over traffic. The one instance where the shipper did not use cross-over traffic, *APS*, occurred in a case over 15 years ago, and related to an issue movement that was very short compared to most SAC cases

VERIFICATION

COMMONWEALTH OF VIRGINIA)
)
CITY OF ALEXANDRIA)

I, THOMAS D. CROWLEY, verify under penalty of perjury that I have read the foregoing Verified Statement, that I know the contents thereof, and that the same are true and correct. Further, I certify that I am qualified and authorized to file this statement.

Thomas D. Crowley

Sworn to and subscribed
before me this 4th day of January, 2013

Diane R. Kavounis
Notary Public for the State of Virginia

My Commission Expires: November 30, 2016
Registration Number: 7160645

VERIFICATION

COMMONWEALTH OF VIRGINIA)
)
CITY OF ALEXANDRIA)

I, DANIEL L. FAPP, verify under penalty of perjury that I have read the foregoing Verified Statement of Daniel L. Fapp, that I know the contents thereof, and that the same are true and correct. Further, I certify that I am qualified and authorized to file this statement.

Daniel L. Fapp

Sworn to and subscribed
before me this day 4th day of January 2013.

DIANE R KAVOUNIS
Notary Public for the State of Virginia

My Commission expires: November 30, 2016
Registration Number. 7160645